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 1                IN THE UNITED STATES DISTRICT COURT
                  FOR THE EASTERN DISTRICT OF TEXAS
 2                          MARSHALL DIVISION

 3    UNITED STATES AUTOMOBILE      )(
      ASSOCIATION
 4                                  )(    CIVIL ACTION NO.

 5    VS.                           )(    2:18-CV-245-JRG

 6                                  )(    MARSHALL, TEXAS
                                          NOVEMBER 4, 2019
 7    WELLS FARGO BANK, N.A.        )(    8:32  A.M.

 8

 9                     TRANSCRIPT OF JURY TRIAL

10                        MORNING SESSION

11       BEFORE THE HONORABLE CHIEF JUDGE RODNEY GILSTRAP,

12                   UNITED STATES DISTRICT JUDGE

13
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14

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   | (Proceedings recorded by mechanical stenography, transcript
24 | produced on a CAT system.)

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07:58:37	1	P R O C E E D I N G S
07:58:37 08:32:46	2	(Jury out.)
08:32:46	3	COURT SECURITY OFFICER: All rise.
08:32:47	4	THE COURT: Be seated, please.
08:34:17	5	Are the parties prepared to read into the record
08:34:36	6	those items from the list of pre-admitted exhibits used
08:34:39	7	during Friday's portion of the trial?
08:34:42	8	MR. BUNT: Yes, Your Honor.
08:34:43	9	THE COURT: Please proceed.
08:34:44	10	MR. BUNT: There were two exhibits used on Friday,
08:34:49	11	that were Plaintiff's Exhibit No. 7 and Plaintiff's Exhibit
08:34:51	12	No. 256. That was it.
08:34:52	13	THE COURT: Any objection to that offering from
08:34:54	14	Defendant?
08:34:55	15	MR. UNDERWOOD: No objection, Your Honor.
08:34:57	16	THE COURT: Do Defendants have a similar offer to
08:35:00	17	make?
08:35:02	18	MR. UNDERWOOD: We do not.
08:35:03	19	THE COURT: All right. Thank you, counsel.
08:35:05	20	Counsel, one thing we did not talk about in
08:35:07	21	chambers this morning that probably needs to be mentioned
08:35:10	22	and dealt with before I bring the jury in, there was trial
08:35:14	23	briefing filed in the case initiated by Defendant under
08:35:17	24	Docket No. -- Document No. 312 with a response filed by
08:35:23	25	Plaintiff at 313 regarding the issues of indicating that

08:35:32   1   only a thousand out of 6,000 banks use auto capture and the

08:35:38   2   remainder use manual capture and indicating a percentage

08:35:46   3   argument or improvement between manual and auto capture at

08:35:50   4   Chase. And having read the briefing on both of those

08:35:53   5   issues from both the Plaintiff -- or Defendant -- moving

08:35:56   6   Defendant and the Plaintiff's perspective, the Court's

08:35:59   7   persuaded that neither of those are appropriate. And both

08:36:05   8   of them risk confusion with the jury and have a higher

08:36:11   9   prejudicial value than they do a probative value.

08:36:13   10   So I am going to preclude the arguments raised in

08:36:22   11   the trial brief as noted.

08:36:30   12   Okay. Am I correct, counsel, that we finished

08:36:34   13   last Friday when the Court recessed with Mr. Weinstein on

08:36:37   14   the stand and he has stepped down; is that correct?

08:36:39   15   MR. SHEASBY: Your Honor, that is correct.

08:36:41   16   THE COURT: Okay. Give me an idea of what

08:36:43   17   Plaintiff's remaining witnesses will be.

08:36:45   18   MR. SHEASBY: Yes, Your Honor. There are going to

08:36:49   19   be four deposition plays -- five depositions plays,

08:36:52   20   Mr. Paul Rosati, Mr. Charles Oakes, Mr. Bharat Prasad,

08:36:59   21   Mr. Makoto Jitodai, and Mr. Jeff Easley and the total time

08:37:03   22   is approximately I would say one hour.

08:37:05   23   THE COURT: All of these are video depositions?

08:37:08   24   MR. SHEASBY: Yes, Your Honor.

08:37:08   25   THE COURT: All right. What will follow the video

08:37:11	1	depositions?
08:37:11	2	MR. SHEASBY: The resting of our case, Your Honor.
08:37:13	3	THE COURT: All right. Who will be the
08:37:18	4	Defendant's first witness if their case-in-chief?
08:37:21	5	MR. MELSHEIMER: May it please the Court, Your
08:37:22	6	Honor. It will be Mr. Andrew Wood from Mitek.
08:37:24	7	THE COURT: All right. And estimate of the direct
08:37:27	8	time on Mr. Wood, Mr. Melsheimer?
08:37:30	9	MR. MELSHEIMER: 45 minutes to one hour, Your
08:37:32	10	Honor.
08:37:32	11	THE COURT: Okay. That's helpful. Thank you,
08:37:35	12	counsel.
08:37:35	13	All right. Let's bring in the jury, please.
08:38:00	14	COURT SECURITY OFFICER: All rise.
08:38:01	15	(Jury in.)
08:38:02	16	THE COURT: Welcome back, members of the jury.
08:38:07	17	Please have a seat.
08:38:09	18	As you will recall, we ended Friday's portion of
08:38:17	19	the trial with the testimony of Mr. Roy Weinstein.
08:38:22	20	Mr. Weinstein's testimony was completed at the time the
08:38:24	21	Court recessed on Friday, and we'll proceed with the
08:38:27	22	remainder of Plaintiff's case-in-chief and its subsequent
08:38:33	23	witnesses at this time.
08:38:35	24	Plaintiff, call your next witness.
08:38:39	25	MS. GLASSER: Good morning. May it please the

08:38:41   1   Court. USAA calls by video deposition Mr. Paul Rosati,

08:38:45   2   Wells Fargo's mobile deposit product manager.

08:38:49   3   THE COURT: All right. Proceed with this witness

08:38:50   4   by deposition.

08:38:51   5   (Videoclip played.)

08:38:56   6   QUESTION: Can you state your full name for the

08:39:14   7   record?

08:39:14   8   ANSWER: Paul Rosati.

08:39:15   9   QUESTION: Where are you employed?

08:39:16 10   ANSWER: Wells Fargo Bank.

08:39:17 11   QUESTION: Sir, after Mobile Deposit 2.0 was

08:39:22 12 implemented by Wells Fargo in 2014, have there been any

08:39:32 13 additional modifications to the auto capture features on

08:39:41 14 the application?

08:39:43 15   ANSWER: Can't speak to what Mitek did or didn't

08:39:46 16 do to auto capture.

08:39:48 17   QUESTION: Sir, you are the product manager for

08:39:55 18 the mobile deposit capture system at Wells Fargo, correct?

08:40:05 19   ANSWER: Yes.

08:40:05 20   QUESTION: You don't know how the system works; is

08:40:09 21 that your testimony?

08:40:10 22   ANSWER: You asked me the modifications to auto

08:40:14 23 capture, which is a Mitek product.

08:40:16 24   QUESTION: How does the mobile capture deposit

08:40:25 25 system at Wells Fargo work from the time of the phone

08:40:29   1   hovering over the check image?

08:40:32   2   ANSWER: It's not Wells Fargo functionality. It's

08:40:36   3   auto capture and Mitek's product.

08:40:39   4   QUESTION: You understand that the Wells Fargo

08:40:42   5   application is an application distributed by Wells Fargo,

08:40:46   6   correct?

08:40:47   7   ANSWER: Yes.

08:40:48   8   QUESTION: You understand that that application

08:40:49   9   has code on it, correct?

08:40:51   10   ANSWER: Yes.

08:40:52   11   QUESTION: It's your testimony that some of that

08:40:55   12   code is Mitek's code, correct?

08:40:57   13   ANSWER: Yes.

08:40:58   14   QUESTION: And you don't know how that application

08:41:02   15   works, correct?

08:41:04   16   ANSWER: I don't.

08:41:05   17   QUESTION: You are aware that USAA has a mobile

08:41:12   18   deposit capture system, correct?

08:41:15   19   ANSWER: Yes.

08:41:15   20   QUESTION: When did you become aware of USAA's

08:41:18   21   system?

08:41:19   22   ANSWER: So USAA primarily came into play when we

08:41:23   23   were looking at multiple check capture. Someone thought

08:41:28   24   they offered that capability. And also when we were

08:41:32   25   looking at manual capture and we were looking at different

08:41:36   1   competitors' UI, USAA was included in that UI review.

08:41:40   2   QUESTION: So let's unpack that. "UI" refers to

08:41:46   3   user interface, correct?

08:41:49   4   ANSWER: Yes.

08:41:50   5   QUESTION: You joined the mobile product deposit

08:41:53   6   group at Wells Fargo in 2014, correct?

08:41:55   7   ANSWER: Yes.

08:41:57   8   QUESTION: You've been in that project for five

08:42:00   9   years, correct?

08:42:02 10   ANSWER: The product manager for five years, yes.

08:42:05 11   QUESTION: At some point after the date of joining

08:42:08 12   that product, your group examined the user interfaces that

08:42:13 13   USAA uses for its mobile check deposit system, correct?

08:42:18 14   ANSWER: Specific to manual and auto capture and

08:42:23 15   specific to multiple check capture.

08:42:25 16   QUESTION: Did you make Wells Fargo legal counsel

08:42:29 17   aware of the USAA press release announcing its licensing

08:42:35 18   program for mobile remote deposit capture?

08:42:39 19   ANSWER: I don't recall.

08:42:40 20   QUESTION: And to be clear for the record, you are

08:42:43 21   the manager of the remote deposit capture program for Wells

08:42:49 22   Fargo from the first quarter of 2014 through the present?

08:42:52 23   ANSWER: Product manager, yes.

08:42:54 24   QUESTION: Would it be fair to say that you've

08:42:58 25   been observing approximately a 10 percent year-over-year

08:43:02   1   growth in the frequency of deposit of checks through

08:43:05   2   images?

08:43:05   3   ANSWER: We forecasted 10 percent growth for 2019.

08:43:08   4   QUESTION: And in the past, have you seen that

08:43:10   5   same 10 percent growth year over year?

08:43:13   6   ANSWER: We've seen 10 percent or more year over

08:43:17   7   year.

08:43:18   8   QUESTION: Is there any point in time since you've

08:43:22   9   joined the program when you haven't seen 10 percent or more

08:43:26 10   growth year over year?

08:43:28 11   ANSWER: No.

08:43:29 12   QUESTION: Does anyone at Wells Fargo understand

08:43:30 13   how the auto capture function of remote deposit capture

08:43:35 14   works?

08:43:35 15   ANSWER: I can't speak for anyone at Wells Fargo,

08:43:39 16   but I can speak for myself.

08:43:40 17   QUESTION: Are you aware of anyone who has

08:43:44 18   familiarity with how the auto capture feature works?

08:43:47 19   ANSWER: Mitek has ultimate authority on that.

08:43:50 20   QUESTION: Sir, are you aware of anyone at Wells

08:43:53 21   Fargo who has familiarity with how the auto capture feature

08:43:56 22   works?

08:43:57 23   ANSWER: No.

08:43:59 24   QUESTION: Does Wells Fargo have the internal

08:44:03 25   capability of creating an alternative to its current auto

08:44:09	1	capture mobile system?
08:44:11	2	ANSWER: I don't know. I haven't looked into
08:44:14	3	that.
08:44:14	4	QUESTION: One of the things -- can you think of
08:44:22	5	any technology at Wells Fargo that is comparable to mobile
08:44:25	6	check deposit?
08:44:25	7	ANSWER: Nothing comes to mind.
08:44:28	8	QUESTION: USAA is a financial services company
08:44:33	9	that serves the military and its family, fair?
08:44:36	10	ANSWER: Yes.
08:44:37	11	QUESTION: You understand that USAA has a bank,
08:44:41	12	correct?
08:44:41	13	ANSWER: Yes.
08:44:42	14	QUESTION: In other words, you understand that its
08:44:44	15	banking division, USAA is a competitor of Wells Fargo,
08:44:49	16	correct?
08:44:49	17	ANSWER: Yes.
08:44:52	18	QUESTION: You understand that this lawsuit is
08:44:54	19	about auto capture, correct?
08:44:54	20	ANSWER: Yes.
08:44:55	21	QUESTION: Do you have an understanding about how
08:44:57	22	the auto capture functionality on Wells Fargo's system
08:45:01	23	actually works?
08:45:01	24	ANSWER: I don't have access to Mitek's source
08:45:07	25	code, no.

08:45:07   1   (Videoclip ends.)

08:45:08   2   THE COURT: Does that complete this witness by

08:45:13   3   deposition?

08:45:14   4   MS. GLASSER: It does, Your Honor.

08:45:15   5   THE COURT: Call your next witness, please.

08:45:17   6   MS. GLASSER: USAA calls by video deposition

08:45:23   7   Mr. Charles Oakes, retired USAA employee and inventor.

08:45:28   8   THE COURT: Please proceed.

08:45:30   9   (Videoclip played.)

08:45:30 10   QUESTION: Will you please state your name for the

08:45:36 11   record?

08:45:36 12   ANSWER: Charles Oakes.

08:45:37 13   QUESTION: And USAA is your current employer,

08:45:40 14   correct?

08:45:40 15   ANSWER: No, I'm retired from USAA.

08:45:42 16   QUESTION: When did you retire, sir?

08:45:44 17   ANSWER: April 1st, 2016. It's been over three

08:45:48 18   years.

08:45:48 19   QUESTION: And what have you been doing in your

08:45:50 20   retirement?

08:45:51 21   ANSWER: Playing golf, teaching golf. I teach

08:45:55 22   junior golf at church, doing ministry work for my church.

08:46:01 23   I do a lot of reading and gardening and enjoying retirement

08:46:06 24   life.

08:46:07 25   QUESTION: Prior to retiring on April 1st, 2016,

08:46:10   1   were you employed at USAA?

08:46:11   2   ANSWER: Yes, I was.

08:46:12   3   QUESTION: And how long prior to your retirement

08:46:16   4   had you been employed with USAA?

08:46:17   5   ANSWER: I had been employed with USAA for 15

08:46:19   6   years.

08:46:20   7   QUESTION: And what was your title when you were

08:46:21   8   asked to take over the Applied Research team?

08:46:23   9   ANSWER: I was promoted to director of Applied

08:46:27 10   Research. I believe it was the official title.

08:46:31 11   QUESTION: So someone at USAA would have an

08:46:33 12   interest in -- in some area of the industry, correct? And

08:46:37 13   they'd come to you and your team and say would you guys

08:46:41 14   look into this, is that a fair characterization?

08:46:43 15   ANSWER: That is -- was one of the processes

08:46:44 16   associated with it. We would get requests, and then we

08:46:46 17   would take a look at it. Did it fit, should we do it? We

08:46:51 18   would have to do kind of a cost analysis, how long would it

08:46:54 19   take. And then the result of that would end up being a

08:46:58 20   white paper analysis.

08:47:00 21   QUESTION: Would you look at what competitors in

08:47:02 22   the industry were doing?

08:47:03 23   ANSWER: That wasn't our -- that wasn't our

08:47:06 24   mission, but in the analysis of the industry, we would take

08:47:08 25   a look at who were the leaders in the industry because

08:47:12   1   usually -- what I would call a sponsor, the sponsor that

08:47:16   2   requested it would ask who are the leaders in this industry

08:47:19   3   and what is the maturity of the industry.

08:47:22   4   QUESTION: So part of your research would include

08:47:24   5   looking to see what companies were out there in that space

08:47:27   6   and analyzing what they were doing, correct?

08:47:31   7   ANSWER: We would take a look at -- as far as what

08:47:36   8   was out there in the industry and what their maturity were

08:47:41   9   associated with whatever aspect we -- we were asked to look

08:47:44 10   at.

08:47:44 11   QUESTION: So prior to that October 2006 email,

08:47:54 12   what, if any, work and research had USAA done on mobile

08:47:59 13   phones and their ability to take an image of a check?

08:48:02 14   ANSWER: Again, we were -- we were looking at the

08:48:04 15   various phones that were available at that time to

08:48:06 16   determine what it was going to be able to take to be able

08:48:09 17   to capture an image and be able to control that image and

08:48:15 18   be able to pass it on.

08:48:16 19   QUESTION: Did you attend that meeting in February

08:48:21 20   of 2008 with Mitek?

08:48:21 21   ANSWER: Yes.

08:48:22 22   QUESTION: And at the time did you have any reason

08:48:23 23   to dispute that?

08:48:24 24   ANSWER: It was a mock-up. It wasn't something

08:48:31 25   that he was showing that would process all the way through.

08:48:37   1   He never did say that it did process through. He just took

08:48:40   2   a picture of a check, and it showed up on the screen.

08:48:42   3   QUESTION: You didn't pay attention -- you didn't

08:48:45   4   really pay attention to what Mitek was doing in mobile

08:48:49   5   deposit one way or another; is that correct?

08:48:50   6   ANSWER: Not to the extent of whether they had a

08:48:52   7   system or didn't really have a system. It -- it really got

08:48:55   8   to the point that we needed to focus on our application

08:48:59   9   period and we needed to move forward.

08:49:01   10   QUESTION: So you wouldn't know one way or another

08:49:04   11   how Mitek's system operates, correct?

08:49:06   12   ANSWER: I don't have any idea how Mitek's system

08:49:09   13   works.

08:49:09   14   QUESTION: And you wouldn't have -- you have no

08:49:10   15   idea what their system was doing, say, in 2013 or 2014?

08:49:13   16   ANSWER: Not at all, no, sir.

08:49:15   17   QUESTION: And sitting here today, do you have any

08:49:17   18   idea what Mitek's system does regarding mobile deposit?

08:49:20   19   ANSWER: I don't know how their system works at

08:49:23   20   all.

08:49:23   21   QUESTION: To be clear, you were focused on USAA's

08:49:26   22   system, correct?

08:49:27   23   ANSWER: We were -- we were focused on getting to

08:49:27   24   the member the systems that we needed to develop and get

08:49:30   25   to -- to our membership.

08:49:32   1   QUESTION: You wouldn't know whether or not Mitek

08:49:38   2   uses the same auto capture technology to capture an image

08:49:46   3   of a check as the auto capture technology claimed in your

08:49:51   4   patents-in-suit, correct?

08:49:52   5   ANSWER: Again, I don't know anything about how

08:49:55   6   their system works at all.

08:49:57   7   QUESTION: Do you have any understanding of how

08:50:02   8   Wells Fargo's mobile deposit system operates?

08:50:04   9   ANSWER: I don't know anything about Wells Fargo's

08:50:07 10   system and how it operates at all.

08:50:09 11   QUESTION: So you can't say one way or another

08:50:24 12   whether Wells Fargo and its mobile deposit system uses the

08:50:29 13   ideas claimed in any of the patents-in-suit, correct?

08:50:33 14   ANSWER: Again, I -- I don't know how their system

08:50:35 15   operates at all.

08:50:36 16   QUESTION: Did you participate in ANSI's standard

08:50:40 17   setting efforts regarding check deposit or check imaging?

08:50:44 18   ANSWER: I did not participate in anything

08:50:47 19   associated with the standards body or ANSI.

08:50:50 20   QUESTION: Do you know if anyone at USAA did?

08:50:53 21   ANSWER: On the standards body?

08:50:55 22   QUESTION: Uh-huh.

08:50:57 23   ANSWER: Not to my knowledge, no.

08:51:01 24   QUESTION: What do you understand USAA to have

08:51:04 25   invented --

08:51:04   1   ANSWER: You're talking about this '571 patent?

08:51:06   2   QUESTION: Which would include the '571?

08:51:07   3   ANSWER: Primarily what was -- when we got to

08:51:12   4   this -- to this stage of mobile deposit, the check images

08:51:22   5   that we were processing -- beginning to increase greatly.

08:51:29   6   We knew way back when that little by little, as the

08:51:35   7   technology changed, we needed to be able to take advantage

08:51:38   8   of the technology, try to take as much of the work off of

08:51:42   9   the consumer in capturing an image associated with that.

08:51:47 10   So from -- from -- from this patent, what we

08:51:54 11   invented was really the autonomous capture of an image

08:51:58 12   without user having to take the picture, the monitoring of

08:52:04 13   the image, to clean it up, to make sure that it was going

08:52:09 14   to be able to pass back end processing, and -- and -- and

08:52:18 15   any type of corrective type of feedback -- again, back to

08:52:23 16   the consumer, because previously, our members were a little

08:52:30 17   bit tech -- tech savvy. They knew how to use a device to

08:52:34 18   be able to capture or obtain the image, but as we grew our

08:52:38 19   base -- needed to grow our base, we needed to do more on

08:52:43 20   the front end to be able to ensure that the image was a

08:52:48 21   good image and the confidence level that we would be able

08:52:51 22   to pass it on. Otherwise, the member is not going to use

08:52:56 23   it -- absolutely not going to use it. It's going to be too

08:53:00 24   hard to use it.

08:53:02 25   So by -- by taking all of that burden off of the

08:53:06   1   member and use it -- basically automatic, that's really in

08:53:13   2   essence what -- what this invention calls for.

08:53:17   3   QUESTION: So is it fair to say that the invention

08:53:22   4   in the 2009 patents, including the '571 patent, is an

08:53:28   5   invention related to autonomous or automatic capture of the

08:53:34   6   check image?

08:53:35   7   ANSWER: The '57 -- you're talking about again the

08:53:40   8   '571, it's the autonomous -- there's several -- again, the

08:53:44   9   autonomous capturing -- really captures -- really obtaining

08:53:47   10   a frame because there's a raw feed of frames coming into

08:53:50   11   it. And the various monitoring type of -- of checking the

08:53:55   12   image, is -- is it -- is it skewed? You have to skew it.

08:54:01   13   Is it -- is the lighting proper, to try to take that all

08:54:04   14   off the member's hands.

08:54:07   15   And so -- and, then, again, you know, the -- the

08:54:09   16   corrective feedback of maybe tilting the cam -- the

08:54:15   17   camera -- the device a little bit to the left, to the

08:54:17   18   right, up and down to be able to catch that frame and to be

08:54:22   19   able to pass it on to -- again, have a higher confidence

08:54:26   20   level that it's going to pass the back end item process and

08:54:30   21   be deposited.

08:54:31   22   QUESTION: Do you know when USAA launched its

08:54:43   23   Deposit@Mobile product?

08:54:44   24   ANSWER: Are you talking about the auto capture?

08:54:46   25   QUESTION: No, the -- the Deposit@Mobile product,

08:54:48 1 do you know when it was --

08:54:50 2   ANSWER: Around the August 2009 time frame.

08:54:52 3   QUESTION: Okay. When the product launched, did

08:54:54 4 it have auto capture?

08:54:55 5   ANSWER: When it launched in 2009, it did not have

08:55:00 6 the auto capture feature.

08:55:02 7   QUESTION: And how long did USAA operate

08:55:05 8 Deposit@Mobile without auto capture?

08:55:06 9   ANSWER: I believe that the development started on

08:55:13 10 the auto capture was around the 2011 time frame, and then

08:55:22 11 it was launched, I believe, in the 2013 time frame.

08:55:27 12   QUESTION: So is it fair to say that for

08:55:30 13 approximately four years, USAA's Deposit@Mobile used manual

08:55:36 14 capture rather than auto capture?

08:55:37 15   ANSWER: I'll try to answer it this way. The

08:55:41 16 complexity -- the complexity associated with taking from

08:55:46 17 the way that the original Deposit@Mobile ran is there was

08:55:53 18 less work on the client, more work on the server side. But

08:55:59 19 as the population grew as far as the use of it, the scaling

08:56:03 20 associated with that, that was not going to work.

08:56:08 21   So we moved the technology upfront on the device

08:56:13 22 itself to be able to capture the -- to -- to obtain the

08:56:18 23 frames in a raw feed, grab the frame, go through the

08:56:22 24 monitoring process at that point in time, that complexity

08:56:27 25 to do that was much more complex than it did as far as the

08:56:31 1 mobile and, of course, with the -- with the -- with the

08:56:36 2 scan itself.

08:56:37 3   The tech savvy people were less and less. It was

08:56:41 4 more layman. And trying to get the image in a way to be

08:56:46 5 able to process all the way through, that technology and

08:56:52 6 what we were trying to do was highly, highly complex.

08:56:56 7   So to be able to do that the right way took some

08:56:59 8 time to do that.

08:57:00 9   QUESTION: Do you recall what the failure rates

08:57:03 10 were for USAA's Deposit@Mobile product when it was using

08:57:08 11 auto -- sorry, manual capture?

08:57:12 12   ANSWER: I believe that the failure rates were

08:57:16 13 around the 15 to 16 percent, around that time -- those --

08:57:23 14 those numbers. And if I remember right, it was reduced to

08:57:28 15 about a 9 or 10 percent --

08:57:31 16   QUESTION: So --

08:57:32 17   ANSWER: -- reduction of failure rates.

08:57:37 18   QUESTION: -- the move from manual capture to auto

08:57:40 19 capture was a move from 15 or 16 percent failure to 9 or

08:57:47 20 10 percent failure, correct?

08:57:48 21   ANSWER: The introduction of the -- of the auto

08:57:49 22 capture system, we showed where the failure rates reduced

08:57:51 23 from around 15 or 16 to 9 or 10, something like that.

08:57:56 24   QUESTION: So approximately a 6 to 7 percent

08:57:59 25 decrease in failure rate, correct?

08:58:00   1   ANSWER: On the failure rates, no, that would be

08:58:05   2   around -- if my math is right, about 40 percent. If you go

08:58:11   3   from the success rates, you're talking about a 6 percent.

08:58:14   4   So I don't know if you're talking about success rates or

08:58:17   5   failure rates.

08:58:17   6   QUESTION: So what's --

08:58:19   7   ANSWER: The effective reduction is around 40, the

08:58:22   8   division -- as I understand the math.

08:58:24   9   QUESTION: So --

08:58:25   10   ANSWER: Which is a huge difference.

08:58:26   11   QUESTION: If you go from 15 to 16 percent, you're

08:58:29   12   saying there was a 40 percent drop?

08:58:31   13   ANSWER: Improvement --

08:58:34   14   QUESTION: 15 to 16 --

08:58:36   15   ANSWER: 40 percent improvement as far as failure

08:58:38   16   rates.

08:58:44   17   QUESTION: So it's your testimony to the jury in

08:58:47   18   this case that you went from a 15 to 16 percent failure

08:58:53   19   rate, and you improved that by 40 percent?

08:58:56   20   ANSWER: The difference -- the difference between

08:58:58   21   that is a 40 percent difference, and that's my -- maybe my

08:59:08   22   math is wrong.

08:59:09   23   QUESTION: Let me go back to my question. Do you

08:59:12   24   know one way or another whether the introduction of mobile

08:59:18   25   check deposit helped USAA get any new members that it did

08:59:22   1   not otherwise have?

08:59:23   2   ANSWER: That, I -- I don't know.

08:59:24   3   QUESTION: Do you have any belief as to whether or

08:59:26   4   not USAA's mobile deposit capability has helped USAA

08:59:35   5   increase its revenue?

08:59:36   6   ANSWER: I don't have those numbers. However,

08:59:41   7   based upon information that during the time that we were

08:59:45   8   launching mobile and going forward, we saw an increase of

08:59:52   9   products being taken out or -- or acquired by members that

08:59:59 10   started using the Deposit@Mobile.

09:00:02 11   So, in essence, did that -- did that increase the

09:00:06 12   revenue with the number of increases of deposits, meaning

09:00:13 13   that there's more dollars coming into the bank which then

09:00:16 14   more loans can be made that would generate revenue. So the

09:00:21 15   exact numbers associated with that, I don't have those

09:00:23 16   exact numbers. That would be something like Jeff Easley or

09:00:29 17   somebody like that would have that.

09:00:30 18   QUESTION: So sitting here today you don't have

09:00:32 19   any concrete evidence as to whether or not USAA's mobile

09:00:36 20   app has helped USAA increase its revenue?

09:00:40 21   ANSWER: I do not have those numbers.

09:00:42 22   QUESTION: Has anyone suggested that USAA would

09:00:44 23   have lost members had it not been for the development of

09:00:48 24   its mobile app?

09:00:48 25   ANSWER: I don't recall anyone saying that to me,

09:01:02   1   other than what I would say that if we did not develop the

09:01:10   2   mobile system or go further than that, then our members are

09:01:14   3   going to go somewhere else.

09:01:16   4   QUESTION: Do you recall whether or not anybody

09:01:19   5   has ever suggested that to you, that but for the

09:01:22   6   development of USAA's mobile app, you would have lost

09:01:24   7   members?

09:01:25   8   ANSWER: It's been so long, I just don't recall if

09:01:31   9   anybody told me that.

09:01:32 10   QUESTION: The imaging of checks was done by banks

09:01:36 11   long before 2006, yes or no?

09:01:38 12   ANSWER: The imaging of checks by banks prior to

09:01:42 13   2006 was done by banks.

09:01:45 14   QUESTION: So yes?

09:01:46 15   ANSWER: So USAA did not invent that part of

09:01:48 16   imaging. We -- we were much further along in the

09:01:54 17   development of our product.

09:01:59 18   Again, being able to use most of the back-end

09:02:01 19   processing and the middle tier as far as the server, we

09:02:04 20   were much further along. We were working primarily on

09:02:09 21   the -- on the -- on the mobile side.

09:02:11 22   So based upon the questions, based upon the

09:02:17 23   mock-up, they really didn't show us enough to make a

09:02:23 24   determination of how far or what -- they had anything

09:02:28 25   there. So we were -- we were -- we felt that we upon were

09:02:31 1 much further along than what they presented because, again,

09:02:35 2 of the questions that they were asking us.

09:02:37 3   QUESTION: You had some discussion with counsel

09:02:41 4 about some interactions with Mitek. Do you remember that?

09:02:43 5   ANSWER: Yes, sir.

09:02:43 6   QUESTION: So let's talk first about an email you

09:02:47 7 were shown with someone at Mitek named Louise Steller, do

09:02:51 8 you remember that?

09:02:51 9   ANSWER: Yes. There was a couple of them.

09:02:54 10   QUESTION: So let me ask you about the 2008

09:02:57 11 meeting.

09:03:00 12   ANSWER: Okay.

09:03:00 13   QUESTION: Mr. DeBello, you said, presented at

09:03:03 14 that meeting, right?

09:03:04 15   ANSWER: Yes, sir, he did.

09:03:04 16   QUESTION: What was your general impression --

09:03:07 17 well, let me ask, had you interacted with Mr. DeBello

09:03:10 18 before that February 2008 meeting?

09:03:12 19   ANSWER: There was only one that I was in on a

09:03:16 20 phone call back in the 2009 time frame when we were having

09:03:24 21 some problems with our software. I think he was on the

09:03:27 22 line.

09:03:31 23   QUESTION: At the February 2008 meeting, did

09:03:34 24 Mr. DeBello ask any questions of you or the other folks at

09:03:37 25 the meeting?

09:03:38   1   ANSWER: Yes, again, they wanted to come in and do

09:03:43   2   a presentation of -- of whatever they were saying they had.

09:03:50   3   So it was their dog and pony show. It was their

09:03:53   4   presentation. They start out by showing the presentation.

09:03:57   5   However, Mr. DeBello started asking more and more questions

09:04:04   6   about our products, about how we -- when I say "products,"

09:04:08   7   how are we processing on our client, on the mobile device,

09:04:13   8   what kind of processing were we doing on the server. And

09:04:15   9   so it was more of asking us questions about how our

09:04:19 10   applications run versus what they could possibly bring to

09:04:24 11   the table.

09:04:26 12   QUESTION: By the time of this February 2008

09:04:28 13   presentation, how far along was your team in its

09:04:33 14   development of what became Deposit@Mobile?

09:04:36 15   ANSWER: We were much further along in the

09:04:41 16   development of our product. Again, being able to use most

09:04:47 17   of the back-end processing and the middle tier, as far as

09:04:50 18   the server, we were much further along. We were working

09:04:53 19   primarily on the -- on the mobile side.

09:04:57 20   So based upon the questions, based upon the

09:05:03 21   mock-up, they really didn't show us enough to make a

09:05:08 22   determination of how far or what -- they had anything

09:05:13 23   there. So we were -- we -- we felt that we were much

09:05:17 24   further along than what they presented, because, again, of

09:05:23 25   the questions they were asking us.

09:05:26   1   (Videoclip ends.)

09:05:26   2   THE COURT: Does that complete this witness by

09:05:28   3   deposition?

09:05:29   4   MS. GLASSER: It does, Your Honor.

09:05:30   5   THE COURT: Call your next witness.

09:05:31   6   MS. GLASSER: USAA calls Mr. Bharat Prasad,

09:05:37   7   inventor.

09:05:42   8   THE COURT: Please proceed.

09:05:44   9   (Videoclip played.)

09:05:45 10   QUESTION: Mr. Prasad, how are you today?

09:05:56 11   ANSWER: I'm doing good. Thank you.

09:05:57 12   QUESTION: Does USAA claim to have invented the

09:06:00 13   concept of mobile check deposit?

09:06:03 14   ANSWER: Mobile check deposit for us is

09:06:06 15   essentially taking the picture of a check, the front and

09:06:09 16   back of the check instrument, being able to deposit it into

09:06:13 17   an account with the end user -- in our case we call them a

09:06:17 18   member -- is -- or having with USAA, and that concept is

09:06:23 19   what we invented.

09:06:24 20   QUESTION: You don't know what remotely capturing

09:06:27 21   an image of a check means?

09:06:28 22   ANSWER: It could be anything like capturing from

09:06:30 23   an ATM, capturing from a check scanner at a teller, it

09:06:35 24   could be a check scanner at a branch near your home, it

09:06:38 25   could be a scanner in your home tied to a computer, home

09:06:38	1	computer. It could be a cellular phone that you carry, a
09:06:43	2	mobile device that has ability to take a picture of a
09:06:47	3	check.
09:06:47	4	QUESTION: Okay.
09:06:47	5	ANSWER: So all of these are potentially remote
09:06:51	6	captures, including a webcam that might be on your
09:06:52	7	computer.
09:06:52	8	QUESTION: And when I refer to remote capture of
09:06:55	9	the image of a check, I'm referring to all those things.
09:06:55	10	ANSWER: Okay.
09:06:57	11	(Videoclip interrupted.)
09:06:57	12	THE COURT: Can you turn up the volume please?
09:07:00	13	(Videoclip continued.)
09:07:00	14	QUESTION: Will you agree with me that systems
09:07:03	15	existed for the remote capture of an image of a check for
09:07:04	16	transmission to a financial institution prior to your work
09:07:06	17	on these patents?
09:07:07	18	ANSWER: Not all the systems. Some of the systems
09:07:09	19	did.
09:07:09	20	QUESTION: Okay. So some of them did?
09:07:12	21	ANSWER: Yes.
09:07:12	22	QUESTION: So the answer to my question is yes,
09:07:15	23	systems existed for the remote capture of a check and
09:07:18	24	transition to a financial institution before your work on
09:07:20	25	these patents?

09:07:20 1   ANSWER: Before we started working on these

09:07:22 2   patents, there was some systems that were allowing a remote

09:07:26 3   capture of a check to come into our financial institution.

09:07:28 4   QUESTION: Are you aware of more than one way to

09:07:33 5   do mobile check deposit?

09:07:35 6   ANSWER: I'm not aware.

09:07:36 7   QUESTION: So the only way you know to do mobile

09:07:39 8   check deposit is the way that's described in these patents?

09:07:42 9   ANSWER: Again, when you -- now you are referring

09:07:45 10   to the patents. And that patent is the mobile check

09:07:47 11   deposit solution for an end user to be able to take a

09:07:50 12   picture of the check and deposit it into their account.

09:07:53 13   QUESTION: And you're aware of no other way than

09:07:57 14   your way, as a technical solution, to do mobile check

09:08:01 15   deposit?

09:08:01 16   ANSWER: Again, patents, concept-wise and

09:08:07 17   specification, layout, how it is done. When you say

09:08:09 18   technical solution, the solution could be an

09:08:13 19   implementation, and multiple implementations can exist for

09:08:17 20   the same specification in the patents.

09:08:20 21   QUESTION: Okay. Are you aware of multiple

09:08:25 22   implementations for the performance of mobile check

09:08:26 23   deposit?

09:08:26 24   ANSWER: Today in the market, there are several,

09:08:29 25   right? And we see multiple deposit capture being used

09:08:34 1 commonly with multiple banks. I'm sure that there are

09:08:37 2 different solution implementations of these concepts that

09:08:41 3 we invented in these patents. So, yes, I am aware that

09:08:45 4 there could be another solution apart from USAA's that is

09:08:49 5 an implementation.

09:08:49 6   QUESTION: And so mobile deposit capture can occur

09:08:55 7 differently than what's described in your patents, correct?

09:08:58 8   ANSWER: Mobile deposit -- capture can be

09:09:03 9 implemented differently, but it has to be under the same

09:09:08 10 concepts.

09:09:08 11   QUESTION: What do you know about the

09:09:10 12 functionality of the Wells Fargo accused product?

09:09:10 13   ANSWER: I think I mentioned that before, the

09:09:11 14 ability for somebody to select an account, being able to

09:09:14 15 capture the picture of a check, front and back, and being

09:09:18 16 able to leverage some of the auto capture functionality

09:09:23 17 that they have to be able to do that seamlessly and being

09:09:27 18 able to submit that to an account for deposit.

09:09:31 19   QUESTION: And so my question is do -- does USAA's

09:09:44 20 Deposit@Mobile product practice any of the claims of your

09:09:47 21 patents?

09:09:47 22   ANSWER: Yes.

09:09:47 23   QUESTION: It does?

09:09:48 24   ANSWER: It does.

09:09:48 25   QUESTION: Okay. Does it practice all of the

09:09:52	1	claims of your patents?
09:09:52	2	ANSWER: It does, in my understanding. Again, am
09:09:54	3	I allowed to refer back to the earlier response I gave you,
09:09:55	4	that I cannot interpret claims. That is not my expertise.
09:10:00	5	But I can certainly talk to the specifications in the
09:10:03	6	patents.
09:10:04	7	QUESTION: Okay. All right. So let's take a look
09:10:05	8	at -- we'll start with the '571 patent, Mr. Prasad.
09:10:05	9	ANSWER: Okay.
09:10:10	10	QUESTION: Okay. And you didn't claim a system
09:10:12	11	that captures an image without regard to the monitoring
09:10:16	12	criteria and then later evaluates those images to determine
09:10:19	13	which image is best?
09:10:20	14	ANSWER: That is not true. So the monitoring
09:10:26	15	criteria does not need to happen only before a capture.
09:10:31	16	There could be any number of monitoring criteria that could
09:10:33	17	happen after the capture, too.
09:10:35	18	QUESTION: But a monitoring criteria has to be
09:10:38	19	satisfied before capture --
09:10:40	20	ANSWER: Yes, sir.
09:10:41	21	QUESTION: -- to satisfy this claim?
09:10:43	22	ANSWER: Yes, sir. So there's a set of monitoring
09:10:45	23	criteria that has to be satisfied before we capture the
09:10:48	24	image for further processing.
09:10:50	25	QUESTION: When we look at the patents that we've

09:10:52 1 examined today, which of these patents do you believe has

09:10:55 2 the most significant technical value?

09:10:57 3   ANSWER: So if you look at -- we use to have a

09:11:05 4 Deposit@Home -- the ability for members to constantly

09:11:08 5 demand a better service, a better convenient way to deposit

09:11:14 6 checks, the need for reducing the failures that we are

09:11:17 7 seeing in our earlier solutions. For me, the '571 patent

09:11:24 8 talks a lot about auto capture, which became critical to

09:11:30 9 our success, especially after we validated it in 2013.

09:11:34 10   QUESTION: Okay. So you think the '571 patent is

09:11:36 11 the most technologically valuable of the patents we've

09:11:41 12 talked about today?

09:11:42 13   ANSWER: Again, I don't want to tie a patent to a

09:11:48 14 value, because if you see the specifications of earlier

09:11:54 15 patents to the '571 patent, you see a lot of the same

09:11:57 16 information existing.

09:11:59 17   So I wouldn't separate out the specification

09:12:04 18 components to identify anything in isolation for the '571

09:12:10 19 patent. It is all built into the remote deposit capture

09:12:15 20 infrastructure. But what I can tell you is from a

09:12:17 21 technical standpoint, auto capture was a huge leap

09:12:21 22 technically from a value perspective to be able to achieve

09:12:25 23 something that is absolutely necessary for us to keep our

09:12:28 24 members.

09:12:28 25   QUESTION: Is USAA aware of how Mitek's Mobile

09:12:39 1 Deposit functions?

09:12:39 2   ANSWER: When you say "functions," are you talking

09:12:41 3 about the inner workings?

09:12:43 4   QUESTION: Yes.

09:12:44 5   ANSWER: No, we're not.

09:12:46 6   QUESTION: What is USAA's level of knowledge of

09:12:51 7 the function of Mitek's Mobile Deposit?

09:12:52 8   ANSWER: USAA is only aware of what Mitek has

09:12:58 9 published in public, and there are some documents like

09:13:03 10 market analysis and other reports that talk about Mobile

09:13:10 11 Deposit, the term Mitek has, you know, released to its

09:13:12 12 customers.

09:13:13 13   QUESTION: Agree?

09:13:15 14   ANSWER: So you have to define what auto capture

09:13:18 15 means for the company at that point in time.

09:13:22 16   So are you saying auto capture with respect to

09:13:26 17 what's laid out in the claims of these patents?

09:13:28 18   QUESTION: Yes.

09:13:29 19   ANSWER: Okay.

09:13:42 20   QUESTION: So you think every commercially

09:13:44 21 available implementation of auto capture on the market

09:13:54 22 today infringes USAA's patents, '571, '090?

09:14:02 23   ANSWER: I'm not aware of every commercially

09:14:05 24 available solution out there for mobile check capture, but

09:14:13 25 what I understand is any mobile auto capture solution, auto

09:14:20 1 capture check solution that talks to the claims details in

09:14:27 2 these patents that we refer to would be infringing them, in

09:14:31 3 my opinion.

09:14:32 4   But I haven't done any infringement analysis, as

09:14:36 5 I'm not a legal person to do that.

09:14:39 6   QUESTION: And -- and you said, paraphrasing

09:14:44 7 again, that Wells Fargo's implementation cannot be the same

09:14:46 8 implementation because we, USAA, haven't marketed ours to

09:14:52 9 anyone else. Do you remember saying something like that

09:14:54 10 previously?

09:14:54 11   ANSWER: Correct, so, yes.

09:14:58 12   QUESTION: Let me -- so my question is, what did

09:14:59 13 you mean when you said that the Wells Fargo implementation

09:15:02 14 couldn't be the same as the USAA implementation?

09:15:04 15   ANSWER: So I was trying to make a distinction

09:15:09 16 between technical -- technical solution and the

09:15:13 17 implementation. So it is likely that different companies

09:15:20 18 could implement something by taking a technical solution as

09:15:24 19 the base and actually implementation could be code that

09:15:30 20 they create.

09:15:32 21   Now, what I meant earlier when I said it cannot be

09:15:36 22 is just that the code base or the code actually

09:15:37 23 implementing it within Wells Fargo is proprietary to their

09:15:44 24 system, and the code that we develop for implementing the

09:15:46 25 same solution within USAA is proprietary code to USAA.

09:15:52   1   QUESTION: To your knowledge has USAA ever given

09:15:58   2   Wells Fargo access to USAA's source code for Deposit@Home

09:16:00   3   or Deposit@Mobile?

09:16:00   4   ANSWER: I'm not aware of any of that.

09:16:02   5   QUESTION: And to your knowledge has USAA ever

09:16:03   6   provided its source code for Deposit@Home or Deposit@Mobile

09:16:07   7   to any other bank for them to use to offer mobile deposit?

09:16:13   8   ANSWER: I'm not aware of that.

09:16:15   9   QUESTION: Have you personally seen any source

09:16:17 10   code for Wells Fargo's Mobile Deposit system?

09:16:21 11   ANSWER: No, I have not.

09:16:23 12   (Videoclip ends.)

09:16:23 13   THE COURT: Does that complete this witness by

09:16:25 14   deposition?

09:16:26 15   MS. GLASSER: It does, Your Honor.

09:16:27 16   THE COURT: Call your next witness.

09:16:28 17   MS. GLASSER: USAA calls Mr. Makoto Jitodai, Wells

09:16:38 18   Fargo's corporate representative.

09:16:39 19   THE COURT: By deposition?

09:16:40 20   MS. GLASSER: By deposition video.

09:16:42 21   THE COURT: Please proceed.

09:16:43 22   (Videoclip played.)

09:16:44 23   QUESTION: Good morning, sir. Can you state your

09:16:48 24   full name for the record?

09:16:48 25   ANSWER: My full name is Makoto Scott Jitodai.

09:16:53	1	QUESTION: Sir, are you employed by Wells Fargo?
09:16:56	2	ANSWER: Yes, I am.
09:16:56	3	QUESTION: What is your position at Wells Fargo?
09:16:58	4	ANSWER: I am a software systems architect at
09:17:03	5	Wells Fargo.
09:17:03	6	QUESTION: Sir, have you been designated to speak
09:17:05	7	on behalf of Wells Fargo?
09:17:06	8	ANSWER: I have been designated to speak on behalf
09:17:09	9	of Wells Fargo for the topics that I -- that I've seen.
09:17:16	10	QUESTION: What non-infringing alternatives exist
09:17:21	11	to Wells Fargo's current mobile check deposit system?
09:17:26	12	ANSWER: In reference to Wells Fargo's mobile
09:17:32	13	check deposit system, in terms of non-infringing
09:17:35	14	alternatives, there is a manual capture option.
09:17:38	15	QUESTION: Do you know what the capture success
09:17:44	16	rate is with the manual capture system?
09:17:46	17	ANSWER: I do not.
09:17:46	18	QUESTION: Do you know if the capture rate for the
09:17:49	19	manual system is sufficiently high that it would even be
09:17:57	20	acceptable to consumers today?
09:17:59	21	ANSWER: I cannot qualify anything about a success
09:18:02	22	rate for this. I -- I -- I am here for -- I understand how
09:18:04	23	the components work together tailored.
09:18:07	24	QUESTION: Okay.
09:18:07	25	ANSWER: I cannot speak to that.

09:18:09   1   QUESTION: You can't tell me whether manual

09:18:11   2   capture would have sufficient acceptance rates to be

09:18:15   3   acceptable to customers, yes or no?

09:18:15   4   ANSWER: No.

09:18:16   5   QUESTION: And the -- the word that you -- that

09:18:21   6   you just spelled out, kMiSnapCaptureMode, that's a

09:18:26   7   parameter?

09:18:28   8   ANSWER: That is correct. That is a parameter

09:18:30   9   that Wells Fargo has been given to set for manual capture.

09:18:33   10   QUESTION: Okay. And so -- so Wells Fargo can

09:18:39   11   change that one parameter to allow for manual capture only

09:18:43   12   in the Mobile Deposit product; is that correct?

09:18:46   13   ANSWER: That is correct, on the -- on the iOS

09:18:52   14   operating system.

09:18:52   15   QUESTION: Is there a different parameter in

09:18:54   16   Android that Wells Fargo can set so that manual capture

09:19:00   17   occurs in MiSnap?

09:19:01   18   ANSWER: Yes.

09:19:01   19   QUESTION: And what is that parameter?

09:19:02   20   ANSWER: Okay. For the sake of the court

09:19:10   21   reporter, I will spell it out again.

09:19:11   22   On the Android side, there is a parameter that you

09:19:15   23   can set, MiSnap_Capture_Mode, and we set it to an

09:19:36   24   enumeration. The enumeration, again, I will spell out,

09:19:48   25   MiSnap_Capture_Mode_MANUAL, which is the equivalent of 1.

09:20:11   1   QUESTION: Did you speak with anyone else

09:20:13   2   regarding non-infringing alternatives?

09:20:17   3   ANSWER: I spoke to Paul Rosati.

09:20:20   4   QUESTION: What -- what did you learn from

09:20:22   5   Mr. Rosati?

09:20:22   6   ANSWER: Let's see, from Paul Rosati, I learned

09:20:36   7   the estimated cost for conversion to manual capture.

09:20:39   8   QUESTION: And to -- and do you know who

09:20:41   9   Mr. Rosati spoke with to obtain the cost information?

09:20:45 10   ANSWER: Paul spoke -- spoke to development

09:20:48 11   managers, Devika Sabharwal, Kumaran Srimatha. He also

09:20:55 12   spoke to QA James Silas and Monica Harvin.

09:20:59 13   QUESTION: What area is Monica Harvin in?

09:21:02 14   ANSWER: I believe she's in what's called digital

09:21:04 15   customer experience.

09:21:05 16   QUESTION: Now, what estimated cost did Mr. Rosati

09:21:08 17   provide to you?

09:21:08 18   ANSWER: 111,760.

09:21:13 19   QUESTION: Okay.

09:21:13 20   ANSWER: 111,760.

09:21:15 21   QUESTION: Did Mr. Rosati provide a break-out for

09:21:19 22   that number?

09:21:20 23   ANSWER: Yes, he did.

09:21:20 24   QUESTION: And what -- what is the break-out for

09:21:23 25   that number?

09:21:24	1	ANSWER: Okay. The development cost is 65,280;
09:21:32	2	the quality assurance cost is 38,880, and the digital
09:21:38	3	experience design is 7,600.
09:21:40	4	QUESTION: Okay. And based on your preparation as
09:21:44	5	Wells Fargo's corporate representative, what is your
09:21:46	6	understanding of the cost for Wells Fargo to implement the
09:21:52	7	manual capture for Mobile Deposit?
09:22:00	8	ANSWER: I think you already asked that. The
09:22:02	9	estimated cost is 111,760 total.
09:22:06	10	(Videoclip ends.)
09:22:07	11	THE COURT: Does that complete this witness by
09:22:12	12	deposition?
09:22:13	13	MS. GLASSER: It does, Your Honor.
09:22:14	14	THE COURT: Call your next witness.
09:22:16	15	MS. GLASSER: USAA calls Mr. Jeffrey Easley, USAA
09:22:24	16	corporate representative by video deposition.
09:22:27	17	THE COURT: Please proceed.
09:22:28	18	(Videoclip played.)
09:22:28	19	QUESTION: Will you please state your name for the
09:22:33	20	record?
09:22:33	21	ANSWER: Jeff Easley.
09:22:34	22	QUESTION: And who is your current employer,
09:22:39	23	Mr. Easley?
09:22:39	24	ANSWER: USAA.
09:22:39	25	QUESTION: What is your current title at USAA?

09:22:41   1   ANSWER: Current title is assistant vice

09:22:46   2 president, governance risk compliance programs.

09:22:49   3   QUESTION: You understand that this deposition is

09:22:52   4 being taken both in your capacity as an individual and in

09:22:58   5 your capacity as a representative of the corporation, USAA?

09:23:01   6   ANSWER: I understand.

09:23:03   7   QUESTION: When you say business case, you mean

09:23:06   8 making money, correct?

09:23:07   9   ANSWER: Correct.

09:23:08 10   QUESTION: So the more services your members use

09:23:10 11 with USAA, the more money USAA makes, correct?

09:23:13 12   ANSWER: That is correct. And with that money, we

09:23:15 13 use to drive more financial security, drive more services

09:23:19 14 that help them with -- with what they're doing.

09:23:22 15   So we also give quite a bit of money back to

09:23:26 16 members as it's a member-owned association, so what we --

09:23:30 17 what we don't need, if we're not improving or fixing

09:23:33 18 things, we're giving back to members through various

09:23:36 19 programs.

09:23:36 20   QUESTION: If Mitek -- supposing Mitek was ready

09:23:40 21 to launch a beta of Mobile Deposit in February of 2008 with

09:23:47 22 not one, not two, but three banks, is it fair to say that's

09:23:52 23 some indication they were pretty far along in the process?

09:23:56 24   ANSWER: I think my answer is -- my assessment was

09:23:58 25 they weren't ready.

09:23:59   1   QUESTION: So at this time, USAA was actively

09:24:03   2   tracking the mobile offerings of its competitors, correct?

09:24:09   3   ANSWER: Correct.

09:24:10   4   QUESTION: And one of those competitors being

09:24:12   5   Wells Fargo?

09:24:12   6   ANSWER: Correct.

09:24:14   7   QUESTION: At this point, USAA knew that Wells

09:24:16   8   Fargo was offering text banking?

09:24:18   9   ANSWER: Correct.

09:24:19   10   QUESTION: Had a banking app?

09:24:21   11   ANSWER: Yes.

09:24:21   12   QUESTION: Had a mobile.com site?

09:24:24   13   ANSWER: Yes.

09:24:24   14   QUESTION: And you also do not know what the total

09:24:28   15   investment of Deposit@Mobile prior to November 2009 would

09:24:32   16   have been?

09:24:32   17   ANSWER: Not specifically, no.

09:24:37   18   QUESTION: What information are you prepared to

09:24:40   19   tell me today about the research and development costs

09:24:45   20   related to Deposit@Home?

09:24:47   21   ANSWER: The information I have today is also in

09:24:53   22   my notes under Cost, first page of Exhibit 4.

09:25:03   23   So it's estimated that major development,

09:25:06   24   including research and development, occurred from 2004 to

09:25:10   25   2013, a period of 10 years. It's estimated we had 30 core

09:25:16 1 engineers, plus a number of individuals outside of the IT

09:25:20 2 development teams working on all of our -- our RDC

09:25:25 3 solutions over that time period.

09:25:29 4   I have listed out a number of areas with

09:25:33 5 individuals involved in those development activities from

09:25:39 6 cash operations, bank systems developments, marketing

09:25:45 7 finance, corporate communications. There's a list of maybe

09:25:48 8 15 or so of these areas where individuals were involved

09:25:53 9 either in a development capacity or a business subject

09:25:58 10 matter expert to allow us to develop these products.

09:26:01 11   QUESTION: Do you have any estimate today about

09:26:05 12 the R&D costs related to the auto capture feature claimed

09:26:09 13 in the asserted patents?

09:26:10 14   ANSWER: I do not have estimates today.

09:26:15 15   QUESTION: Do you know if it was in excess of

09:26:20 16 $50,000.00?

09:26:21 17   ANSWER: To give it a comparison, projects lasting

09:26:33 18 one year with seven developers typically cost around a

09:26:37 19 million dollars of just IT spend, just for the developers.

09:26:41 20   QUESTION: So you can't say whether it was

09:26:44 21 $50,000.00 more or less?

09:26:45 22   ANSWER: Not without more detail.

09:26:47 23   QUESTION: USAA also tracks whether each attempted

09:26:52 24 deposit is successful?

09:26:54 25   ANSWER: Yes.

09:26:54 1   QUESTION: So using manual capture in April 2013,

09:26:58 2 USAA had a success rate of 84 percent, correct?

09:27:08 3   ANSWER: Correct.

09:27:08 4   QUESTION: And after the introduction of auto

09:27:10 5 capture, that improved to a success rate of 91 percent?

09:27:16 6   ANSWER: That's what the data shows, yes.

09:27:20 7   QUESTION: So you're looking at a 7 percent

09:27:23 8 increase, correct, in success?

09:27:25 9   ANSWER: Well, percentage of increase.

09:27:31 10   QUESTION: Of success increase, from approximately

09:27:33 11 84 to approximately 91 --

09:27:33 12   ANSWER: Correct.

09:27:34 13   QUESTION: -- that's 7 percent, correct?

09:27:35 14   ANSWER: Correct.

09:27:36 15   QUESTION: Prior to auto capture, USAA members

09:27:38 16 were experiencing an 84 percent success rate, correct?

09:27:42 17   ANSWER: Correct.

09:27:45 18   QUESTION: And your opinion is there's no value in

09:27:49 19 that 84 percent success rate?

09:27:50 20   ANSWER: Not my opinion. My point is we are in a

09:27:56 21 highly competitive environment where features like auto

09:28:05 22 capture literally have the -- the weight in terms of

09:28:12 23 whether or not members choose us for our bank and use that

09:28:17 24 feature, given they have that feature in many other places

09:28:21 25 now.

09:28:21   1   QUESTION: To be clear, for four years -- or

09:28:26   2   approximately four years from 2009 to 2013, USAA operated

09:28:32   3   mobile deposit without auto capture?

09:28:34   4   QUESTION: Correct?

09:28:37   5   ANSWER: So for approximately four years, your

09:28:41   6   members were positioning their phones and pressing a

09:28:44   7   button?

09:28:45   8   ANSWER: Correct.

09:28:45   9   QUESTION: Does USAA have any evidence that in

09:28:47   10 that four-year period where folks were pressing the button

09:28:51   11 in -- on USAA's mobile deposit app, that members left USAA

09:29:02   12 to go elsewhere because of the manual capture feature?

09:29:15   13   ANSWER: Not that I'm aware of, and I'm also not

09:29:19   14 aware that there was a competitive offering in which to

09:29:22   15 leave us for.

09:29:24   16   QUESTION: Has USAA done any analysis of whether

09:29:28   17 or not any increase in usage of a mobile deposit feature

09:29:37   18 was related to the auto capture feature versus other

09:29:40   19 environmental effects, such as larger adoption of mobile

09:29:44   20 phone usage?

09:29:46   21   ANSWER: I don't believe we have that data broken

09:29:48   22 out at that level.

09:29:49   23   QUESTION: Have you done any studies about whether

09:29:52   24 or not increased trends or increased usage of mobile

09:29:55   25 deposit was due to the introduction of the auto capture

09:29:58   1   feature versus other environmental factors such as general

09:30:02   2   increases in mobile phone use?

09:30:04   3   ANSWER: Given I personally moved away around that

09:30:09   4   time or right after that time, I don't have that

09:30:13   5   information. It's possible that we have done research on

09:30:17   6   that.

09:30:17   7   QUESTION: And USAA would have been enjoying that

09:30:21   8   economic benefit of RDC from 2009 to 2013 as it was getting

09:30:28   9   deposits from its mobile deposit app that used mobile

09:30:33 10   cap -- that used manual capture, correct?

09:30:36 11   ANSWER: As a competitive feature that attracted

09:30:40 12   checking account relationships and their balances that come

09:30:43 13   with the product, yes, correct.

09:30:45 14   QUESTION: You've gone from 33 percent of members

09:30:48 15   having -- banking with you in 2009 to 39 percent?

09:30:53 16   ANSWER: Correct.

09:30:54 17   QUESTION: In 2018?

09:30:56 18   ANSWER: Correct.

09:30:57 19   QUESTION: But still approximately 61 percent of

09:31:01 20   your members do not have a banking account with USAA?

09:31:06 21   ANSWER: A checking account.

09:31:08 22   QUESTION: A checking account?

09:31:09 23   ANSWER: Correct.

09:31:14 24   QUESTION: And as of 2018, 61 percent of your

09:31:19 25   members do not have a checking account with USAA even

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09:31:26    1   though USAA has introduced auto capture to its mobile

09:31:32    2   deposit product, correct?

09:31:32    3           ANSWER:  Yes, that 61 percent who do not bank with

09:31:41    4   us includes current product offerings in features.

09:31:48    5           QUESTION:  And so rephrased another way, even

09:31:51    6   though you now have auto capture in your mobile deposit

09:31:54    7   product, 61 percent of your members still don't bank with

09:31:56    8   you?

09:31:57    9           ANSWER:  Correct.

09:32:02   10           QUESTION:  And can you tell me, when USAA was

09:32:15   11   beginning the process of Mobile@Home and mobile deposit,

09:32:25   12   how did it allocate cost for capital developments?

09:32:31   13           QUESTION:  Capital developments are managed

09:32:37   14   through -- at that time a program management office was

09:32:43   15   allotted a certain amount of technology spend.  The

09:32:51   16   development area, at least the core in the beginning, was

09:32:58   17   run out of Ricky Burks' -- or at least led by Ricky Burks'

09:33:05   18   development teams, but it expanded to different development

09:33:08   19   teams through the years?

09:33:09   20           QUESTION:  When USAA was allocating money to

09:33:14   21   develop the Deposit@Home and Deposit@Mobile, did it break

09:33:16   22   down the allocations specifically between those two

09:33:22   23   different products or were they -- was money allocated just

09:33:25   24   to -- to both of those?

09:33:30   25           ANSWER:  Money was allocated to both of those.
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09:33:34   1   QUESTION: Are you familiar with the economic

09:33:36   2   benefits that USAA associates with remote deposit capture?

09:33:42   3   ANSWER: Yes, I am familiar.

09:33:44   4   QUESTION: Can you tell us generally what those

09:33:46   5   benefits are?

09:33:47   6   ANSWER: We see five economic benefits. Number

09:33:55   7   one, cost savings on check processing from channels like

09:34:06   8   check by mail costing $1.21 per deposit to remote deposit

09:34:14   9   capture, costing four cents per deposit.

09:34:17 10   Number two, we see capital investment savings in

09:34:21 11   avoiding the building and maintaining of branches to

09:34:26 12   attract and collect more deposits. This is a traditional

09:34:32 13   banking model. That's a -- a significant amount of capital

09:34:35 14   to build and maintain those.

09:34:36 15   QUESTION: How does remote deposit capture,

09:34:38 16   whether it's by using mobile deposit or @Home deposit, how

09:34:48 17   does that allow the bank not to have additional branch

09:34:52 18   offices?

09:34:52 19   ANSWER: So the traditional banking model, up and

09:34:57 20   to that point, still here today but certainly remote

09:35:07 21   deposit capture is an innovation that -- that addresses

09:35:09 22   this. The traditional model is to open branches in

09:35:19 23   geographical areas, given customers bank with someone who's

09:35:25 24   in their neighborhood or has a physical presence, and the

09:35:29 25   branch, especially in those times, was the way in which

09:35:31 1 banks attracted new customers and deposits that they

09:35:34 2 brought with them. With remote deposit capture, that

09:35:43 3 untethered the ability to deposit a check from having to go

09:35:49 4 to a branch to do it.

09:35:52 5   QUESTION: All right. You mentioned savings

09:35:55 6 and -- and the not having to have branch offices. What

09:35:58 7 other economic benefits are associated with remote deposit

09:36:03 8 capture?

09:36:03 9   ANSWER: In the traditional -- well, in the

09:36:09 10 banking model generally, deposits that are brought to the

09:36:14 11 bank by our members serve as, you know, cheap, stable

09:36:28 12 funding sources for the bank's lending products, just like

09:36:33 13 any other bank.

09:36:34 14   So attracting deposits, especially without

09:36:41 15 spending a large amount of capital, goes into the cost of

09:36:45 16 those funds, which is what serves as the -- the cost of

09:36:50 17 what has been loaned out to members through credit cards

09:36:56 18 and/or bank loans.

09:36:58 19   And the difference between that cost and the

09:37:00 20 interest rate on the -- on the loans or the credit card is

09:37:05 21 what's known as a net interest margin, so that's another

09:37:09 22 economic benefit.

09:37:10 23   In this case, other banks have a cost of funds for

09:37:15 24 deposits, but the branch network is -- is a significant

09:37:20 25 cost of that.

09:37:21   1   In this case, not spending that capital brings the

09:37:25   2   cost of our funds to be lent out lower -- you know,

09:37:29   3   competitively lower.

09:37:30   4   QUESTION: So if USAA does not have money that its

09:37:35   5   members are depositing for it to loan out, where does it go

09:37:40   6   to get money to loan out to other folks?

09:37:43   7   QUESTION: Well, first of all, if -- if any bank

09:37:46   8   doesn't have deposits to loan, the financial regulators

09:37:50   9   would not be happy or not approve of that model. That's

09:37:57 10   somewhat what happened in the banking crisis of 2008.

09:38:01 11   But alternatives to obtaining funds to lend would

09:38:10 12   come from loading -- you know, borrowing from the

09:38:16 13   Fed Reserve, borrowing from other banks. The cost of that

09:38:21 14   would be significantly higher.

09:38:24 15   QUESTION: What other economic benefits does USAA

09:38:27 16   associate with remote deposit capture?

09:38:28 17   ANSWER: Another economic benefit is the ecosystem

09:38:36 18   in which a member who has a checking account with us is

09:38:42 19   likely to be introduced to other products that USAA offers.

09:38:49 20   So the checking relationship, as we refer to it,

09:38:55 21   means a member experiences USAA, and a service like remote

09:38:59 22   deposit capture is a very valuable service in terms of

09:39:04 23   convenience and time savings for members. So that, as we

09:39:11 24   say internally, delightful experience leads to an interest

09:39:16 25   in other ways that USAA can provide financial services to

09:39:19   1   them.

09:39:19   2   So there's a path in -- which typically follows

09:39:22   3   the acquisition of a checking account where a member is

09:39:24   4   likely to pick up a savings account, an auto loan, or auto

09:39:32   5   insurance product or -- or a credit card product as part of

09:39:35   6   that relationship path.

09:39:37   7   Each of those products have their own financials

09:39:41   8   to them, so that's -- that's an economic benefit to USAA.

09:39:45   9   QUESTION: Why was it important to USAA to develop

09:39:50   10   the remote deposit capture system in the first place?

09:39:55   11   ANSWER: I think as a culture USAA, and certainly

09:40:04   12   I can speak for myself, is powered by facilitating

09:40:09   13   financial security for our members, the members of the

09:40:12   14   military and their families. We seek to be the provider of

09:40:16   15   choice -- that's -- that's what we do -- motivated by those

09:40:21   16   who serve us.

09:40:27   17   In doing so, remote deposit capture is a very

09:40:34   18   innovative product. Members received it extremely well.

09:40:41   19   And for us, it was very much tailored to their lifestyle,

09:40:46   20   their situations, meaning members of the military -- active

09:40:50   21   members of the military move quite a bit during their

09:40:53   22   service. It's called a permanent change of station. That

09:40:58   23   happens quite a bit in military families, and the whole

09:41:00   24   family is affected, not just the active military member.

09:41:05   25   So this was unique from our perspective in the

09:41:09 1 sense that we have a way of allowing them to bank wherever

09:41:12 2 they are anytime, anywhere, which is really suited to a

09:41:18 3 mobile military.

09:41:20 4   So that -- being the person involved in -- on the

09:41:25 5 business side and product leader creating these services,

09:41:28 6 that was a real motivation and energy source for us.

09:41:32 7   QUESTION: So if USAA already had the remote

09:41:35 8 deposit capture system, why was it important to USAA to

09:41:39 9 also come up with an auto capture feature?

09:41:45 10   ANSWER: We continue to improve the service year

09:41:50 11 over year. As we saw, competitor banks enter with

09:42:01 12 offerings of their own. It was more important to us to

09:42:05 13 achieve our mission to be a provider of choice to ensure

09:42:10 14 competitiveness -- competitiveness of the feature.

09:42:14 15   Competitiveness in this since is from a member's

09:42:18 16 perspective the ability -- the ease of use, the one time --

09:42:35 17 you know, and one attempt to put a check into view from a

09:42:37 18 digital device and have it deposited successfully. From

09:42:42 19 the member's perspective, funds, you know, into their

09:42:45 20 account, that is the convenience that's at play here, as

09:42:48 21 compared to having to be in a place where there's a bank

09:42:53 22 branch to drive to, to hand that check to a teller. And in

09:43:01 23 many cases, the funds may be available the next day, if not

09:43:05 24 days later.

09:43:06 25   So we continue to develop features around this

09:43:12   1   service to make it as simple, easy to use, and provide the

09:43:19   2   convenience of access to their deposit funds as possible.

09:43:25   3   QUESTION: Do you have any view as to the value of

09:43:28   4   the auto capture feature?

09:43:32   5   ANSWER: I do.

09:43:33   6   QUESTION: What is that?

09:43:34   7   ANSWER: We value it at about 40 percent of the

09:43:37   8   value of the product itself. The basis for that is the 40

09:43:43   9   percent improvement we saw in success rates when we

09:43:49 10   introduced the feature, meaning we improve the likelihood

09:43:57 11   by 40 percent that the image of the check that we captured

09:44:01 12   for you would be captured and processed successfully.

09:44:07 13   To a member, that meant fewer times where we told

09:44:11 14   you there was a -- there was an error and we could not

09:44:13 15   process the image.

09:44:16 16   Again, back to what is the value of this, it's

09:44:19 17   convenience. That was a huge increase in convenience for

09:44:23 18   members.

09:44:23 19   QUESTION: Are you familiar with any comparable

09:44:27 20   license agreements that we can look to analyze the

09:44:31 21   ecosystem benefits that you discussed?

09:44:34 22   ANSWER: Yes. I would say a comparable licensing

09:44:39 23   agreement is our agreement with Zelle.

09:44:42 24   QUESTION: Can you tell us what Zelle is?

09:44:44 25   ANSWER: I can. Zelle is, from a member's

09:44:50 1 perspective, a service offered to allow you to send money

09:44:55 2 to another person. So that ecosystem benefit comparison is

09:45:08 3 as an access to money. So if you need to get money to a

09:45:12 4 friend, family member, in this case, or another account you

09:45:16 5 have at another bank, this agreement with Zelle is a

09:45:19 6 service provided that gives you that access as a banking

09:45:26 7 member.

09:45:26 8   QUESTION: Those economic benefits are not unique

09:45:29 9 to auto capture, correct?

09:45:30 10   ANSWER: I would say auto capture is a competitive

09:45:37 11 feature that without it would cause benefits not to be

09:45:43 12 realized.

09:45:44 13   QUESTION: But you are -- but USAA was realizing

09:45:47 14 those benefits long before the introduction of auto

09:45:49 15 capture, correct?

09:45:49 16   ANSWER: Some amount of them, yes.

09:45:52 17   (Videoclip ends.)

09:45:52 18   THE COURT: Does that complete this witness by

09:45:55 19 deposition?

09:45:56 20   MS. GLASSER: It does, Your Honor. However, the

09:45:58 21 parties have identified two audio visual errors, and with

09:46:03 22 the Court's permission, the parties jointly would request

09:46:06 23 to play those two right now. They're from Mr. Prasad and

09:46:11 24 Mr. Rosati.

09:46:12 25   THE COURT: Do Defendants concur with that?

09:46:16   1   MR. BITTNER: Yes, Your Honor.

09:46:16   2   THE COURT: All right. Let's play these two short

09:46:18   3   corrections.

09:46:20   4   (Videoclip played.)

09:46:21   5   QUESTION: So you have no basis to claim that

09:46:23   6   Wells Fargo has copied the code that USAA uses for its

09:46:29   7   product implementation, do you?

09:46:31   8   ANSWER: So if you're talking about copying USAA's

09:46:34   9   code into Wells Fargo systems, I have no basis of that.

09:46:39   10   (Videoclip ends.)

09:47:25   11   (Videoclip played.)

09:47:25   12   QUESTION: When did you become involved with the

09:47:29   13   Mobile Deposit project at Wells Fargo?

09:47:30   14   ANSWER: Been a mobile deposit product manager for

09:47:34   15   about five years.

09:47:35   16   QUESTION: So when did that start?

09:47:38   17   ANSWER: Around Q1, 2014, when I got involved.

09:47:42   18   QUESTION: So that was at about the time that

09:47:47   19   Wells Fargo -- let me ask the question.

09:47:49   20   You became a product manager responsible for

09:47:51   21   Mobile Deposit at Wells Fargo in the first quarter of 2014,

09:47:55   22   fair?

09:47:56   23   ANSWER: Yes.

09:47:57   24   QUESTION: And that was about the time that Wells

09:47:59   25   Fargo launched its Mobile Deposit 2.0 system, fair?

09:48:03   1   ANSWER: There was a project already underway when

09:48:06   2 I joined, yes.

09:48:07   3   QUESTION: And that project was Mobile Deposit

09:48:10   4 2.0, fair?

09:48:11   5   ANSWER: Phase 2, yes.

09:48:13   6   QUESTION: And that project involved the

09:48:15   7 implementation of what's commonly known in the industry as

09:48:18   8 auto capture, fair?

09:48:19   9   ANSWER: Yes.

09:48:20 10   (Videoclip ends.)

09:48:22 11   THE COURT: All right.   Does this complete the

09:48:24 12 witnesses by deposition offered by Plaintiff?

09:48:27 13   MR. SHEASBY: It does, Your Honor.

09:48:28 14   THE COURT: All right.   Plaintiff, call your next

09:48:31 15 witness.

09:48:31 16   MR. SHEASBY: Your Honor, at this time, USAA rests

09:48:35 17 its case-in-chief, subject to rebuttal.

09:48:38 18   THE COURT: All right.   Ladies and gentlemen, the

09:48:40 19 Plaintiff has rested its case-in-chief.   We'll next proceed

09:48:44 20 with the Defendant's case-in-chief.

09:48:46 21   Before I ask Defendant to call their first

09:48:49 22 witness, we're going to take a short recess.

09:48:51 23   If you will simply close and leave your notebooks

09:48:54 24 in your chairs in the jury box, follow all the instructions

09:48:57 25 I've given you about your conduct throughout the trial,

09:49:00	1	including not to discuss the case with each other or anyone
09:49:02	2	else, we'll be back in here shortly to continue, and we'll
09:49:05	3	begin with the Defendant's first witness in their
09:49:08	4	case-in-chief.
09:49:08	5	The jury's excused for recess at this time.
09:49:12	6	COURT SECURITY OFFICER: All rise.
09:49:13	7	(Jury out.)
09:49:13	8	THE COURT: Counsel, I'll attempt to keep this
09:49:35	9	recess short.
09:49:36	10	The Court stands in recess.
09:49:38	11	COURT SECURITY OFFICER: All rise.
09:49:39	12	(Recess.)
09:49:39	13	(Jury out.)
09:49:39	14	COURT SECURITY OFFICER: All rise.
09:53:10	15	THE COURT: Be seated, please.
10:00:42	16	All right. Let's bring in the jury, please.
10:01:51	17	COURT SECURITY OFFICER: All rise.
10:02:05	18	(Jury in.)
10:02:05	19	THE COURT: Please be seated.
10:02:18	20	Plaintiff having rested its case-in-chief,
10:02:27	21	Defendant, call your next -- first witness.
10:02:30	22	MR. MELSHEIMER: May it please the Court, Your
10:02:33	23	Honor. Wells Fargo calls Mr. Andrew Wood, and he will be
10:02:36	24	examined by Mr. Michael Bittner.
10:02:39	25	THE COURT: All right. Mr. Wood, if you'll come

10:02:41	1	forward and be sworn, please.
10:03:03	2	(Witness sworn.)
10:03:03	3	THE COURT: Please come around, sir, have a seat
10:03:05	4	at the witness stand.
10:03:06	5	MR. BITTNER: And, Your Honor, as Mr. Wood is
10:03:09	6	getting seated, I'm going to be using the easel. May I go
10:03:12	7	ahead and move it forward?
10:03:14	8	THE COURT: You may.
10:03:22	9	All right. Ladies and gentlemen of the jury, I
10:03:29	10	need to instruct you before counsel begins their direct
10:03:33	11	examination that Mr. Andrew Wood is a fact witness. He is
10:03:37	12	not an expert witness. He is here to discuss how a certain
10:03:43	13	product works. He is not here to discuss whether the
10:03:48	14	working of that product relates in any way to the
10:03:52	15	patents-in-suit or the asserted claims at issue.
10:03:54	16	All right. With that, you may proceed with your
10:03:56	17	direct examination.
10:03:57	18	MR. BITTNER: May it please the Court.
10:03:57	19	ANDREW WOOD, DEFENDANT'S WITNESS, SWORN
10:03:57	20	DIRECT EXAMINATION
10:03:59	21	BY MR. BITTNER:
10:03:59	22	Q. Good morning, Mr. Wood. Would you please introduce
10:04:01	23	yourself to the jury?
10:04:02	24	A. Hi. My name is Andrew Wood.
10:04:06	25	Q. Where do you live?

10:04:07   1   A.   I live in San Diego, California.

10:04:10   2   Q.   Is this your first time in East Texas?

10:04:12   3   A.   No, it's not. My wife has some family down in Alto.

10:04:17   4   It's about an hour and a half south -- southwest of here.

10:04:20   5   And I've been here a couple of times, once, when my first

10:04:23   6   son was born to introduce him to the family, and another

10:04:26   7   time to celebrate New Year's.

10:04:29   8   Q.   Where do you currently work?

10:04:30   9   A.   I work at Mitek Systems.

10:04:33   10   Q.   And what is your current position?

10:04:35   11   A.   Currently, I'm a staff software engineering manager.

10:04:39   12   Q.   Can we talk a little about your background?

10:04:42   13   A.   Yes, we may.

10:04:43   14   Q.   Where did you go to college, sir?

10:04:45   15   A.   I went to the University of California San Diego.

10:04:50   16   Q.   And what was your degree in?

10:04:51   17   A.   It was in computer science.

10:04:55   18   Q.   Why did you decide to get a degree or pursue a degree

10:04:59   19   in computer science?

10:05:01   20   A.   I was really into playing video games as a teenager,

10:05:04   21   and I wanted to learn how to build and develop video games.

10:05:07   22   Q.   And did you, indeed, develop video games after college?

10:05:11   23   A.   No, I did not.

10:05:11   24   Q.   What did you do instead?

10:05:14   25   A.   I started working with cell phones instead.

10:05:17   1   Q.   And when did you first start working with cell phones?

10:05:19   2   A.   That was the summer of my junior year, so 2003.

10:05:25   3   Q.   Back in 2003, what kind of cell phones were you working

10:05:28   4   with?

10:05:28   5   A.   Those were those old flip phones.

10:05:32   6   Q.   Now, did you start working with these old flip phones

10:05:35   7   before or after the first iPhone was released?

10:05:39   8   A.   It was before.   The iPhone wasn't released for another

10:05:44   9   four years.

10:05:45 10   Q.   And what were you doing with flip phones -- cell phones

10:05:48 11   in the pre-iPhone days?

10:05:50 12   A.   Back then, I was writing apps for flip phones.

10:05:54 13   Q.   Is app short for application?

10:05:59 14   A.   Yes, that's right.

10:05:59 15   Q.   What is an app or application?

10:06:01 16   A.   An app or application is some software that runs on a

10:06:06 17   computer or on a phone.

10:06:08 18   Q.   What are some of the standard apps that run on today's

10:06:12 19   smartphones?

10:06:12 20   A.   You might have a maps app, text messaging app, Internet

10:06:19 21   browser app, the phone app to call people, a camera app,

10:06:25 22   photo gallery app, lots of things.

10:06:28 23   Q.   Let's go back to 2003 and your work with flip phones.

10:06:33 24   What are -- can you give the jury an example of an

10:06:35 25   application that you worked on back in those early flip

10:06:38	1	phone days?
10:06:40	2	A. Sure. Our most popular application back then was a
10:06:45	3	searchable version of the King James Bible and the Spanish
10:06:48	4	version, as well, because back then, you couldn't access
10:06:51	5	the whole Internet on your phones. You could only get a
10:06:56	6	small part of it, so people needed apps to get things that
10:06:59	7	they wanted.
10:07:00	8	Q. What are some of the other apps that you developed back
10:07:02	9	then?
10:07:03	10	A. We also developed a dictionary and a thesaurus app so
10:07:08	11	people could look up words on-the-go, as well.
10:07:08	12	Q. All tolled, how long have you been working with
10:07:11	13	software development?
10:07:11	14	A. Over 20 years, but 16 years professionally.
10:07:18	15	Q. And how did you end up at Mitek?
10:07:22	16	A. After flip phones, smartphones started getting more
10:07:26	17	popular. I was interested in learning how to develop for
10:07:27	18	those. I took some courses, did some training, and
10:07:29	19	eventually Mitek had an opening for a smartphone app
10:07:35	20	development. I applied, and I was hired.
10:07:37	21	Q. When you were hired at Mitek, were you focused on
10:07:43	22	programming for Android phones or for iPhones?
10:07:46	23	A. It was Android.
10:07:47	24	Q. What titles have you held during your time at Mitek?
10:07:50	25	A. I started as an Android software engineer, and then I

10:07:54   1   was promoted to lead Android software engineer. After

10:07:59   2   that, I was promoted to principal engineer for mobile

10:08:04   3   capture products.

10:08:05   4   Q.   Let me stop you there. What do you mean by principal

10:08:08   5   engineer for mobile capture products?

10:08:10   6   A.   Well, it was a promotion. I had been working

10:08:14   7   exclusively with Android, but I started to expand my role

10:08:18   8   and started working with iOS developers, as well, and tried

10:08:22   9   to bring our development efforts in line with each other.

10:08:25   10   Q.   So when you were promoted, did you start working with

10:08:28   11   both Android and iPhone platforms for Mitek software?

10:08:32   12   A.   Yes, that's correct.

10:08:34   13   Q.   And what is your title today?

10:08:36   14   A.   Today, I'm a staff software engineering manager.

10:08:42   15   Q.   Was that another promotion?

10:08:44   16   A.   Yes, it was.

10:08:44   17   Q.   And what does your current job today entail? What are

10:08:48   18   your responsibilities at Mitek?

10:08:49   19   A.   Today, I manage two teams of software developers for

10:08:56   20   Android iOS and web that are building Mitek's software that

10:09:03   21   runs on smartphones.

10:09:04   22   Q.   And are you involved with Mitek's products today --

10:09:09   23   Mitek software today for both Android and iPhone?

10:09:14   24   A.   Yes, I am.

10:09:14   25   Q.   And what product specifically have you been focused on

10:09:19   1   during your time at Mitek?

10:09:20   2   A.   That's mainly MiSnap.

10:09:22   3   Q.   What is MiSnap?

10:09:23   4   A.   So MiSnap is some software that runs on a smartphone,

10:09:33   5   and it allows you to take pictures of a variety of

10:09:39   6   different documents for a variety of purposes.

10:09:41   7   Q.   Is MiSnap limited to check capture?

10:09:46   8   A.   No, it's not.

10:09:47   9   Q.   What else is MiSnap designed to do?

10:09:49   10   A.   Well, MiSnap can also take pictures of

10:09:53   11   government-issued IDs like driver's licenses or passports.

10:09:57   12   Q.   What's the purpose of that technology? Why design

10:10:01   13   something to take pictures of government-issue IDs or

10:10:07   14   passports?

10:10:08   15   A.   That's for a different part of MiSnap that's used for a

10:10:11   16   Mobile Verify product. And Mobile Verify let's you sign up

10:10:16   17   for new accounts online securely, and the bank or the

10:10:21   18   company needs to know that you are who you say you are, so

10:10:25   19   we need a picture of your ID. We need to validate that

10:10:30   20   it's a real authentic ID. We need to match that to your --

10:10:34   21   your selfie, your face.

10:10:35   22   And, conversely, if some hacker in China gets your

10:10:38   23   information, it'd make it hard for them to set up an

10:10:42   24   account in your name. So Mobile Verify is protecting

10:10:46   25   against identity theft and fraud.

10:10:49   1   Q.   What are some companies that use Mobile Verify?

10:10:53   2   A.   Lots of companies, including PayPal, a number of banks

10:10:56   3   do, as well.

10:10:56   4   Q.   Let's return to mobile check deposit. Other than

10:10:59   5   taking the image of the check, what else does MiSnap do in

10:11:04   6   the mobile check deposit process?

10:11:05   7   A.   That's it. It just takes the -- the front and the back

10:11:09   8   image of the check.

10:11:10   9   Q.   Are you familiar with the terms "auto capture" and

10:11:13   10 "manual capture"?

10:11:14   11 A.   Yes, I am.

10:11:16   12 Q.   As you use it around the office, what do you understand

10:11:19   13 manual capture to mean?

10:11:22   14 A.   So for manual capture, the user takes their smartphone,

10:11:26   15 holds it over the check, and there's a button on the

10:11:29   16 screen. When they're ready, they push that button, and

10:11:31   17 MiSnap takes a picture.

10:11:32   18 Q.   Do you know if there's more than one way to do manual

10:11:36   19 capture?

10:11:36   20 A.   Yes. Yes, there is.

10:11:38   21 Q.   How do you know that?

10:11:40   22 A.   We have done it several ways at Mitek.

10:11:43   23 Q.   Okay. As you use it around the office, what do you

10:11:47   24 understand auto capture to mean?

10:11:47   25 A.   Auto capture, you're going to hold your smartphone over

10:11:53   1   the -- the check, and it's going to automatically take the

10:11:59   2   picture for you. You don't have to push the button.

10:12:02   3   Q. Do you know if there's more than one way to do auto

10:12:05   4   capture?

10:12:05   5   A. Yes, there is.

10:12:08   6   Q. How do you know?

10:12:08   7   A. We have done it several ways at Mitek.

10:12:11   8   Q. How many different ways has Mitek done auto capture?

10:12:15   9   MR. SHEASBY: Your Honor, may we approach?

10:12:16 10   THE COURT: Approach the bench.

10:12:17 11   (Bench conference.)

10:12:27 12   THE COURT: Yes, counsel?

10:12:28 13   MR. SHEASBY: In the pre-trial conference, Your

10:12:30 14   Honor made clear that we would not have a discussion about

10:12:33 15   any versions of Mitek software that were not accused of

10:12:37 16   infringement in this case. And I believe that Mr. Bittner

10:12:41 17   is now going to ask about historical ways in which auto

10:12:44 18   capture were done. And that would violate your Court's

10:12:46 19   instruction.

10:12:46 20   So he must first, I think, lay the foundation that

10:12:49 21   he's to speak about the versions of auto capture that are

10:12:53 22   in the accused versions that are before this Court.

10:12:57 23   THE COURT: Mr. Bittner?

10:12:59 24   MR. BITTNER: First, Mr. Wood doesn't know what

10:13:00 25   the accused versions are. There is an accused version,

10:13:04 1 2.0.6, which was identified by Dr. Conte as an accused

10:13:06 2 version which has these two ways I'm about to identify with

10:13:09 3 Mr. Wood in the code side-by-side, and that's going to come

10:13:12 4 out today.

10:13:12 5   MR. SHEASBY: No, Your Honor, that's actually

10:13:14 6 incorrect. The accused version of MiSnap that is used by

10:13:18 7 Wells Fargo does not implement this other -- what he's

10:13:21 8 referring to. The only thing that's implemented by Wells

10:13:24 9 Fargo is the -- the version that Mr. Conte has been

10:13:28 10 discussing.

10:13:29 11   THE COURT: Well, the witness may not know what

10:13:32 12 the accused products in the case are, but you do,

10:13:34 13 Mr. Bittner. And you need to limit your questions to

10:13:37 14 accused products in the case.

10:13:38 15   MR. BITTNER: And I'm limiting my question to

10:13:41 16 2.0.6, which had two different ways side-by-side of doing

10:13:45 17 it in the code.

10:13:46 18   MR. SHEASBY: Your Honor, we didn't use the other

10:13:49 19 way of asserting. So he's talking about a different

10:13:51 20 something in a code that Wells Fargo never implemented.

10:13:56 21   MR. BITTNER: Your Honor's ruling on --

10:13:58 22   THE COURT: You can address that on cross, as long

10:13:59 23 as he stays within the accused products, we're all right.

10:14:03 24   MR. BITTNER: Yes, sir, and that will be clear.

10:14:07 25   THE COURT: All right. Let's proceed.

10:14:08   1   MR. SHEASBY: Thank you, Your Honor.

10:14:09   2   (Bench conference concluded.)

10:14:11   3   THE COURT: Let's proceed.

10:14:12   4   Q.   (By Mr. Bittner)   Mr. Wood, I want to direct your

10:14:18   5   attention to Version 2.0.6 of -- I'll ask you a question in

10:14:25   6   just a second.

10:14:25   7   Are you aware in Version 2.0.6 of MiSnap if there

10:14:31   8   are two versions of auto capture side-by-side in the code?

10:14:33   9   A.   Yes, there are.

10:14:35   10   Q.   Okay.   Does Mitek have different names for those two

10:14:40   11   versions?

10:14:41   12   A.   Yes, they do.

10:14:42   13   Q.   What is the first name of the first way that Mitek has

10:14:45   14   done auto capture?

10:14:45   15   A.   The original way was called video still capture mode.

10:14:50   16   Q.   And, Mr. Wood, what was the name of the second way of

10:15:18   17   doing auto capture?

10:15:19   18   A.   The new way was called video frame processing.

10:15:22   19   Q.   Mr. Wood, what led Mitek to switch from video still

10:15:47   20   capture to video frame processing?

10:15:51   21   A.   There were two main reasons for that.

10:15:54   22   Q.   And what was the first?

10:15:55   23   A.   The first reason was we got feedback from our

10:16:03   24   customers.   They were saying that MiSnap was returning lots

10:16:07   25   of blurry images of checks, and we needed to try to improve

10:16:12   1   that and make it better.

10:16:14   2   And then the second reason was, at that time, and

10:16:19   3   still today, phones are getting more powerful, the cameras

10:16:24   4   on those phones are getting more powerful, and the images

10:16:28   5   that MiSnap was using -- was analyzing, they were getting

10:16:32   6   bigger and better and had more detail in them, so we could

10:16:36   7   just use those directly instead of having to capture a new

10:16:39   8   image.

10:16:39   9   Q.   What is the main difference between video still capture

10:16:44   10 and video frame processing?

10:16:46   11 A.   The main difference is that both of these will be the

10:16:52   12 camera will capture an image, MiSnap will analyze it, and

10:16:56   13 video frame processing, the new way, it just returns that

10:17:01   14 image.   But in the old way, video still capture, it would

10:17:04   15 ask the camera to take a bigger high resolution photo, and

10:17:08   16 we stopped doing that with video frame processing.

10:17:11   17 Q.   I'm -- I'm going to return -- is it okay if we return

10:17:14   18 to auto capture and manual capture more generally?

10:17:17   19 A.   Yes.

10:17:18   20 Q.   Today, does MiSnap take pictures using auto capture or

10:17:22   21 manual capture?

10:17:23   22 A.   It can do both.

10:17:27   23 Q.   Who makes the decision whether MiSnap uses manual

10:17:32   24 capture or auto capture?

10:17:32   25 A.   That's up to the banks or the user to decide.

10:17:37   1   Q.   What decisions can the banks make?

10:17:40   2   A.   The banks can use just manual capture, they can use

10:17:45   3   just auto capture, or they can use some mixture of both.

10:17:51   4   Q.   What do you mean mixture of both, how can you mix

10:17:55   5   manual with auto?

10:17:57   6   A.   Well, I'm thinking of two ways for that.

10:18:00   7   Q.   What's the first?

10:18:00   8   A.   The first way is what I call -- what we call a time

10:18:04   9   out.   So if you're using auto capture and it's not working

10:18:07   10   and it's been 15, maybe 20 seconds, it'll time out.   MiSnap

10:18:11   11   will time out and let the user switch to manual capture

10:18:15   12   mode and push the button and take the picture.   So that's

10:18:17   13   one way.

10:18:18   14   Q.   Other than this time out way, what's the second way you

10:18:20   15   can mix auto capture with manual capture?

10:18:23   16   A.   The second way, it's like a hybrid way.   During auto

10:18:31   17   capture, some banks will still put the manual capture

10:18:35   18   button on the screen at the same time.   So if it's not

10:18:38   19   working or if the user is ready, they can push that button

10:18:42   20   and manually override and take a picture.

10:18:46   21   Q.   Do you know if Wells Fargo uses just auto, just manual,

10:18:51   22   or one of these mixtures that you've discussed?

10:18:54   23   A.   I do.   They use the mixture where it's the auto capture

10:18:58   24   hybrid with the manual capture override button.

10:19:04   25   Q.   I'd like to talk about -- strike that.

10:19:07	1	I'd like to talk now about MiSnap's actual source
10:19:11	2	code, is that okay?
10:19:12	3	A. Yes.
10:19:13	4	Q. Mr. Wood, what is source code?
10:19:15	5	A. Source code is a set of instructions that a software
10:19:22	6	developer or programmer or engineer writes, and those
10:19:28	7	instructions tell a computer or a phone what to do, how to
10:19:33	8	operate, how to behave.
10:19:37	9	Q. Have you personally written source code before?
10:19:39	10	A. Yes, I have, lots of it.
10:19:42	11	Q. How long have you been writing source code?
10:19:46	12	A. For over 20 years and 16 years professionally.
10:19:53	13	Q. Are you generally familiar with the source code for
10:19:55	14	MiSnap?
10:19:56	15	A. Yes, in general, I am.
10:19:57	16	Q. How did the source code for MiSnap get written? Did
10:20:01	17	one person sit down and write it all at once, or was it
10:20:04	18	something that happened over time?
10:20:05	19	A. It wasn't just one person. It's grown and improved
10:20:10	20	over time.
10:20:10	21	Q. All tolled, how many developers have written MiSnap
10:20:23	22	source code?
10:20:23	23	A. Ballpark, at least a dozen of us.
10:20:26	24	Q. And how is it that multiple people can be writing the
10:20:30	25	same thing, how does that work in real life?

10:20:32   1   A.   They can be working on different parts of the source

10:20:35   2   code at the same time, or they can come in -- a developer

10:20:38   3   can come in months or years later and try to clean up the

10:20:42   4   code or try to fix a bug or need to add some new feature or

10:20:50   5   functionality, they'll come in and modify the code.

10:20:54   6   Q.   And are you familiar with the source code for Version

10:20:58   7   3.7.1 for iPhones of MiSnap?

10:21:00   8   A.   Yes, in general I am.

10:21:02   9   MR. BITTNER: Mr. Barnes, can we get DTX-611.

10:21:08 10   Q.   (By Mr. Bittner)   Mr. Wood, what is DTX-611?

10:21:10 11   A.   This is some of the source code from MiSnap iOS for

10:21:16 12   iPhones, Version 3.7.1.

10:21:21 13   Q.   And are you familiar with these pages of code here in

10:21:24 14   DTX-611?

10:21:25 15   A.   Yes, I am.

10:21:26 16   Q.   If someone wasn't familiar with these pages like you

10:21:29 17   are, how would they be able to know that this is MiSnap

10:21:33 18   code for iPhone for Version 3.7.1?

10:21:37 19   A.   You can look at the very top two lines on the title,

10:21:44 20   after ForReview, we see MiSnap, iOS, so iPhones, 3.7.1

10:21:53 21   source -- so this is some of the source for iPhones for

10:21:57 22   Version 3.7.1 of MiSnap.

10:22:00 23   Q.   And we see the words ForReview here, what do those

10:22:07 24   mean?

10:22:07 25   A.   ForReview means after the lawsuit was filed, Mitek

10:22:11 1 gathered all the source code for lots of different versions

10:22:16 2 of MiSnap and provided that to USAA so they could try to

10:22:19 3 understand how it works.

10:22:22 4 Q. Were you involved in collecting all the pages that were

10:22:25 5 provided in this case?

10:22:26 6 A. Yes, I was.

10:22:26 7 Q. On the second line we see here in the file directory

10:22:35 8 the word DevApp.

10:22:38 9   MR. BITTNER: Mr. Barnes, can you highlight

10:22:42 10 DevApp?

10:22:42 11 Q. (By Mr. Bittner) What does that mean?

10:22:42 12 A. DevApp means it's some of MiSnap's internal test code.

10:22:48 13 Q. Is DevApp code that's actually used by Wells Fargo?

10:22:50 14 A. No, it's not.

10:22:51 15 Q. What would it say in place of DevApp if this were code

10:22:55 16 used by Wells Fargo?

10:22:57 17 A. For Wells Fargo, it would say either MiSnap reference

10:23:01 18 app or MiSnap SDK.

10:23:04 19 Q. Was that MiSnap SDK or MiSnap reference app code

10:23:10 20 provided to USAA?

10:23:11 21 A. Yes, absolutely.

10:23:12 22 Q. Since we have it here and since it's come up, is it

10:23:15 23 okay if we look at DTX-611?

10:23:18 24 A. Yes, that's fine.

10:23:19 25 Q. On a high level, what's happening on this first page of

10:23:23   1 code that we have here?

10:23:24   2 A.   At a high level, the iPhone camera has just captured

10:23:28   3 some output, 2278, captureOutput, and it has sent this to

10:23:35   4 MiSnap. It's sending an image that was captured to MiSnap.

10:23:39   5 MiSnap takes that image and then it analyzes it and tries

10:23:46   6 to determine if it thinks it's a good image or not.

10:23:49   7 Q.   I want to break that down line-by-line, is that okay?

10:23:54   8 A.   Yeah, that's fine.

10:23:56   9   MR. BITTNER: Let's start by looking at Lines 2278

10:23:59 10 to 2280 if we can blow those up, Mr. Barnes.

10:24:04 11 Q.   (By Mr. Bittner) Mr. Wood, what is happening here on

10:24:06 12 Line 2278?

10:24:07 13   MR. SHEASBY: Your Honor, may we approach?

10:24:10 14   THE COURT: Approach the bench.

10:24:11 15   (Bench conference.)

10:24:22 16   MR. SHEASBY: Your Honor, at this point, he's

10:24:23 17 going to elicit testimony from Mr. Wood that the image is

10:24:29 18 captured when it's delivered to Mitek's software which is a

10:24:33 19 claim term in the patent, and I don't think that's

10:24:36 20 appropriate to do that in this context. I also think it's

10:24:40 21 inappropriate because Mr. Wood was not able to provide this

10:24:43 22 exact testimony in his 30(b)(6) examination deposition.

10:24:50 23   MR. BITTNER: Your Honor, Mr. Wood --

10:24:51 24   THE COURT: Wait a minute, what do you mean he was

10:24:53 25 not able to provide it in his deposition testimony?

10:24:56 1   MR. SHEASBY: I asked him, could you -- can you

10:24:58 2   identify for me the line of code where it says it's

10:25:00 3   captured before monitoring criteria, and he said he could

10:25:03 4   not.

10:25:05 5   MR. BITTNER: I disagree. He was never asked

10:25:06 6   about these lines of code. He was asked about code later

10:25:09 7   on. The deposition transcript portion that Mr. Sheasby is

10:25:15 8   referencing is where he's talking about when the camera

10:25:18 9   actually captures and Mr. Wood said that's going to be

10:25:21 10 proprietary Apple code. This is the message back and

10:25:22 11 forth.

10:25:22 12   MR. SHEASBY: I can get you the transcript

10:25:25 13 passage, Your Honor.

10:25:25 14   THE COURT: That's not necessary. If he's given a

10:25:28 15 prior inconsistent statement in his deposition and not able

10:25:31 16 to do something now he's able to do, you're free to attempt

10:25:35 17 to impeach him during cross-examination.

10:25:38 18   Also, you're free to elicit from him an admission

10:25:42 19 that the word "capture" here is not necessarily is the way

10:25:45 20 the Court's construed it in this lawsuit, the same thing

10:25:49 21 with "analyze." All of that can be done on

10:25:51 22 cross-examination. None of it rises to the level of me

10:25:54 23 limiting his direct testimony.

10:25:56 24   MR. SHEASBY: I understand your instructions, Your

10:25:58 25 Honor, thank you.

10:25:59   1   MR. BITTNER: Thank you, Your Honor.

10:26:01   2   MR. MELSHEIMER: Thank you, Your Honor.

10:26:02   3   (Bench conference concluded.)

10:26:07   4   THE COURT: Let's proceed.

10:26:08   5   Q. (By Mr. Bittner) Mr. Wood, returning to Lines 2278 to

10:26:12   6   2280 of DTX-611, what is happening here on Line 2278?

10:26:17   7   A. So can I set the stage a little bit?

10:26:22   8   Q. Please do.

10:26:23   9   A. Okay. So software talks to other software by sending

10:26:28 10   messages back and forth. This is referring to -- 2278 to

10:26:34 11   2280 is referring to a message that the iPhone's camera has

10:26:39 12   sent to MiSnap. It's sending some captured output, it's

10:26:45 13   putting into the sampleBuffer, which is kind of like a box,

10:26:49 14   and it's sending that to MiSnap.

10:26:52 15   Q. Let me see if we can break that down a little bit.

10:27:05 16   Did I hear you correctly, did you say this first

10:27:12 17   line that starts with (void) captureOutput is a message?

10:27:18 18   A. It's part of the message, yes.

10:27:24 19   Q. Who is the message between?

10:27:25 20   A. It's between the iPhone camera's software and MiSnap.

10:27:31 21   Q. Mr. Wood, is this a one-way message or a two-way

10:27:44 22   message?

10:27:44 23   A. It's essentially a one-way message.

10:27:49 24   Q. How do you know that?

10:27:50 25   A. I know that because of the -- the void at the beginning

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10:27:56    1    on Line 2278.
10:27:57    2    Q.   What does this word "void" tell you about this being a
10:28:02    3    one-way or a two-way message?
10:28:06    4    A.   Void means nothing, so when messages are sent back and
10:28:09    5    forth, you need to know what's in those messages.  So the
10:28:14    6    camera is sending MiSnap a sample buffer with an image in
10:28:18    7    it, and MiSnap is sending void or nothing back, so it's no
10:28:25    8    information going back to the camera.
10:28:27    9    Q.   Okay.  So the iPhone camera is sending what to MiSnap?
10:28:30   10    A.   Its captured output in a sample buffer.
10:28:34   11    Q.   And what is MiSnap sending back?
10:28:41   12    A.   Nothing.
10:28:41   13    Q.   Void?
10:28:42   14    A.   No information.  Yeah, void.
10:28:45   15    Q.   Now, Mr. Wood, who created these first three lines of
10:28:53   16    code?
10:28:53   17    A.   These referred to the three lines of code that Apple
10:28:59   18    software developers wrote.  And any app, including MiSnap,
10:29:03   19    if they want to receive these frames, they need to put
10:29:06   20    these three lines of code into their code.
10:29:08   21    Q.   So why does Mitek have three lines of code that Apple
10:29:14   22    created in MiSnap?
10:29:15   23    A.   Because MiSnap needs to -- actually, the camera has to
10:29:22   24    talk to MiSnap.  And in order to do that, Apple has said
10:29:27   25    you need to have these three lines.  Otherwise, it's not
```

10:29:31   1   going to know where to send those messages to.

10:29:33   2   Q.   What about these three lines tells you that the Apple

10:29:38   3   camera is involved?

10:29:39   4   A.   On 2278, there's AVCaptureOutput.

10:29:46   5   Q.   What does AV stand for?

10:29:46   6   A.   2280, there's AVCaptureConnection. Sorry, I didn't

10:29:46   7   mean to cut you off.

10:29:50   8   Q.   What does AV stand for?

10:29:51   9   A.   AV stands for audio/visual. It's a prefix that Apple's

10:29:59 10   engineers use. It's part of their AV foundation, and it

10:30:02 11   refers to audio/visual software, including the camera.

10:30:08 12   Q.   Mr. Wood, would it be accurate or inaccurate to say

10:30:12 13   that these three lines of code have no purpose here?

10:30:15 14   A.   That would be inaccurate.

10:30:16 15   Q.   Do you know what would happen if Mitek deleted these

10:30:23 16   three lines of code from this page?

10:30:26 17   A.   If we deleted those, this code wouldn't run. And

10:30:30 18   technically, it wouldn't even run on a phone.

10:30:32 19   Q.   Where does MiSnap start analyzing the image capture

10:30:44 20   output that has been placed in the sample buffer?

10:30:47 21   A.   That's lower on the page.

10:30:50 22   MR. BITTNER: Mr. Barnes, can we scroll down?

10:30:52 23   Q.   (By Mr. Bittner) Do you know what line it's on,

10:30:54 24   Mr. Wood?

10:30:54 25   A.   2323.

10:30:56   1   MR. BITTNER: Can we bring up Line 2323,

10:30:58   2   Mr. Barnes?

10:30:59   3   Q. (By Mr. Bittner) Mr. Wood, what is happening here in

10:31:10   4   Line 2323?

10:31:11   5   A. On this line, there's a bit called analyzeFrame with a

10:31:20   6   sampleBuffer. This is sending a message to some other

10:31:25   7   MiSnap code that's called analyzeFrame, and it's passing

10:31:28   8   that sampleBuffer, which had that image in it, to that

10:31:34   9   other MiSnap code.

10:31:35 10   Q. In this version of the code and all versions of the

10:31:37 11   code since March 2015, will the code capture a new image if

10:31:42 12   that analysis turns up a good image and MiSnap decides to

10:31:46 13   use it?

10:31:46 14   A. No, it will not.

10:31:54 15   MR. BITTNER: Mr. Barnes, can we go to the next

10:31:57 16   page and pull up Line 2357 now?

10:32:11 17   Q. (By Mr. Bittner) Now, Mr. Wood, would it be accurate

10:32:13 18   or inaccurate to say that this is where an image is being

10:32:16 19   captured by the camera?

10:32:17 20   A. That would be inaccurate.

10:32:19 21   Q. What is happening in Line 2357?

10:32:22 22   A. This is setting a variable to yes. It's saying the

10:32:28 23   capture session is over. And MiSnap is not going to

10:32:31 24   analyze any more frames.

10:32:34 25   Q. Is Line 2357 unique to auto capture?

```
10:32:37   1   A.   No, it's not.

10:32:39   2   Q.   How do you know that?

10:32:40   3   A.   You have to scroll up.  This code is indented.  There's

10:32:48   4   some code above it.  Yeah, 2341 to 2343.

10:32:53   5   Q.   And is -- what do those lines tell you about the line

10:32:55   6   we just looked at, Line 2357?

10:32:58   7   A.   It's saying that if any of these things are true, that

10:33:02   8   code down below is going to run.  So 2341 is saying if

10:33:06   9   we're in a manual override mode, or 2342, if we're in the

10:33:12  10   manual capture mode, or three, if we're in auto capture

10:33:16  11   mode, if any of those are true, we're going to execute that

10:33:19  12   same line of code.

10:33:21  13           MR. BITTNER:   Let's look now at Line 2374.

10:33:25  14   Mr. Barnes, can we blow that up?  Right at the bottom

10:33:43  15   there.

10:33:46  16   Q.   (By Mr. Bittner)   Mr. Wood, would it be accurate or

10:33:48  17   inaccurate to say that Line 2374 is where the camera is

10:33:54  18   capturing an image?

10:33:55  19   A.   That would be inaccurate.

10:33:56  20   Q.   What is happening at Line 2374?

10:34:00  21   A.   This is logging some of our UXP, our user experience,

10:34:06  22   and it's kind of like a stopwatch.  It's saying the capture

10:34:10  23   session is over.

10:34:10  24   Q.   Why do you track time for the capture session?

10:34:14  25   A.   If we have to debug an issue, like a customer has an
```

10:34:19 1 issue, we can't go around to everyone and ask what they

10:34:22 2 were doing at that time, so we track a lot of different

10:34:25 3 events. We track when we show the tutorial screen to a

10:34:31 4 user, we track when they start up MiSnap, we track if

10:34:35 5 MiSnap couldn't find the document or if it was too dark in

10:34:38 6 the room or if it was just too dark on the screen. And we

10:34:43 7 use that to try and reconstruct what was happening, what

10:34:46 8 the user was seeing.

10:34:48 9 Q. Is what happens at Line 2374 unique to auto capture?

10:34:51 10 A. No, it's not.

10:34:55 11 Q. Do you track the same time for auto capture, manual

10:34:57 12 capture, and manual override?

10:35:01 13 A. Yes, we do.

10:35:03 14   MR. BITTNER: Okay. Let's go to, Mr. Barnes, now

10:35:05 15 Line 2389.

10:35:16 16 Q. (By Mr. Bittner) Looking at Line 2389, Mr. Wood, would

10:35:19 17 it be accurate or inaccurate to say that this is where an

10:35:22 18 image is captured by the camera?

10:35:24 19 A. That is inaccurate.

10:35:25 20 Q. What is happening in Line 2389?

10:35:28 21 A. In this line, this code is sending a message to some

10:35:32 22 other MiSnap code that's called

10:35:44 23 miSnapCaptureViewStartedAutoCapture:withRect.

10:35:46 24 Q. Okay. What does the part of the code called the

10:35:48 25 miSnapCaptureViewStartedAutoCapture, what does that do?

10:35:49   1   A.   That will play a little sound.   It will show an

10:35:53   2   animation on the screen.   And in auto mode, it's going to

10:35:58   3   draw the border around where the check was.

10:36:02   4   Q.   So miSnapCaptureViewStartedAutoCapture just plays an

10:36:09   5   animation?

10:36:10   6   A.   Essentially, yes.

10:36:11   7   MR. BITTNER: Let's look at Lines 2479 to 2481

10:36:29   8   now.

10:36:34   9   Q.   (By Mr. Bittner)   And, Mr. Wood, would it be accurate

10:36:45 10   or inaccurate to say that what's -- that what's happening

10:36:47 11   in Lines 2479 to 2481 is where an image is being captured

10:36:53 12   with a camera?

10:36:54 13   A.   That is inaccurate.

10:36:54 14   Q.   What is happening here?

10:36:56 15   A.   So here, the image that was already captured is being

10:37:02 16   compressed.

10:37:03 17   Q.   What do you mean by compressed?

10:37:05 18   A.   Compressed means it's making it take up less space.

10:37:10 19   It's encoding it as a JPEG, and JPEGs are used on the

10:37:15 20   Internet for millions, maybe billions of images because

10:37:20 21   they take up less space, so --

10:37:23 22   Q.   Do you have -- do you have an example compression in

10:37:27 23   real life?

10:37:27 24   A.   Yeah.   You could think of it as like a space vacuum

10:37:33 25   bag.   You put your comforter inside and then you suck out

10:37:38   1   all the air, and what you're left with takes up less space.

10:37:42   2   You don't have a new comforter, but it takes up less space.

10:37:47   3   Q.   Now, I want to return to, Mr. Wood, the two ways of

10:38:05   4   auto capture we spoke about at the beginning of your

10:38:07   5   testimony.

10:38:07   6   DTX-611, which we just talked about, does that

10:38:10   7   operate using still video capture or video frame

10:38:13   8   processing?

10:38:13   9   A.   That one uses the new way, the video frame processing.

10:38:17 10   Q.   When did Mitek switch from still video capture to video

10:38:23 11   frame processing?

10:38:24 12   A.   That change was finalized in September 2014.

10:38:31 13   Q.   Have you seen code where both options, still video

10:38:35 14   capture and video frame processing, are shown side-by-side?

10:38:38 15   A.   Yes, I have.

10:38:40 16   MR. BITTNER: Mr. Barnes, can we pull up DTX-11?

10:38:56 17   Now, Mr. Barnes, can we go to the bottom of 3565 and the

10:39:02 18   top of page 3566?   Oh, no, he's got it.   Okay.

10:39:14 19   Q.   (By Mr. Bittner)   Mr. Wood, what do we see here in

10:39:17 20   Lines 1496 to 1515?

10:39:22 21   A.   This is describing -- 1496, it says allow video frames.

10:39:27 22   This is describing the new way, the video frame processing.

10:39:31 23   MR. BITTNER: Actually, Mr. Barnes, can we scroll

10:39:34 24   up to the very top of Page 3565 or the very top of Page

10:39:38 25   3566?

10:39:39   1   Q.   (By Mr. Bittner)   Mr. Wood, one question.   What version

10:39:41   2   of MiSnap is this?

10:39:42   3   A.   I can see in the middle here, it's MiSnap -- whoops --

10:39:47   4   MiSnap iOS 2.0.6, so it's for iPhones, Version 2.0.6.

10:39:57   5   Q.   Okay.   Now, let me turn to the first question again.

10:39:59   6   What is happening in Lines 1496 to 1515?

10:40:02   7   A.   This is describing the video way -- the video frame

10:40:05   8   processing.

10:40:05   9   Q.   What we just discussed in DTX-611?

10:40:08   10   A.   Yes.

10:40:09   11   Q.   And we see in Lines 1504 and 1506, two comments.

10:40:18   12   A.   Uh-huh.

10:40:18   13   Q.   What do those mean to you?

10:40:24   14   A.   They're saying that we're going to send along the YUV

10:40:30   15   frame, which we know on 1506 is just the sample buffer

10:40:31   16   output, what the camera has already captured, instead of

10:40:35   17   capturing the photo quality image.   So we're not going to

10:40:38   18   capture a new high resolution photo like we did with video

10:40:43   19   still capture.

10:40:43   20   Q.   Okay.   And we -- let me ask you this question.   How do

10:40:46   21   you know that 1504 and 1506 are comments?

10:40:49   22   A.   They start with this //, and that is a comment.   It

10:40:58   23   means that the computer or the phone is going to ignore

10:41:00   24   them.

10:41:01   25   Q.   Why do MiSnap developers put comments in the code?

10:41:04 1   A.   It's a good practice. You can -- they would do that so

10:41:07 2   you could remember -- tell future developers or yourself

10:41:16 3   what that code is doing or maybe why it's doing that.

10:41:19 4   Q.   Now, what does the computer itself do with the comment

10:41:23 5   as it's going through this code and trying to execute it?

10:41:25 6   A.   It does nothing with it, it ignores it, and technically

10:41:34 7   the phone would never even see those comments.

10:41:35 8   Q.   Going down lower in the code to Line 1517, we see the

10:41:45 9   word "else if."

10:41:47 10 A.   Uh-huh.

10:41:47 11 Q.   What does "else if" mean?

10:41:49 12 A.   So "else if," self.photoOutput, if that second part is

10:41:57 13 true, that they have the "else if," then the code beneath

10:41:59 14 it is going to run. If it's not true, then it's not going

10:42:01 15 to run.

10:42:02 16 Q.   Is "else if" a common instruction that source code

10:42:06 17 developers give to computers?

10:42:08 18 A.   Yeah, it's common. You might have "if," "else if,"

10:42:14 19 "else." I could give you an analogy. It's like my son's

10:42:16 20 birthday is coming up this week. He's turning four. And

10:42:20 21 when I get home, my wife might give me a set of

10:42:23 22 instructions. She might say, if there's a sheet cake, buy

10:42:28 23 the sheet cake, else if they have cupcakes, get the

10:42:35 24 cupcakes, else buy cookies. So I'll come home with a sheet

10:42:40 25 cake or cupcakes or cookies, but not all three. That's

10:42:46 1 just too much sugar.

10:42:48 2 Q. What's going on under the "else if" in Lines 1519 to

10:42:54 3 1534?

10:42:54 4 A. That is -- it's sending a message to the camera. It's

10:43:01 5 calling this -- sending a message called capture still

10:43:07 6 image asynchronously from connection, so it's sending a

10:43:13 7 message to the camera to capture a new still image.

10:43:15 8 Q. And, in particular, you're looking at 1534; am I

10:43:18 9 correct?

10:43:19 10 A. Yeah, 1534.

10:43:20 11 Q. And, again, remind the jury when Mitek switched from

10:43:24 12 the first way of doing things that we saw with DTX-611 and

10:43:30 13 the top of this page -- when did Mitek make the switch to

10:43:35 14 the DTX-611 and top way of doing things that we discussed

10:43:39 15 earlier?

10:43:39 16 A. That was finalized in September 2014.

10:43:42 17 Q. And before September 2014, which way would Mitek

10:43:46 18 operate?

10:43:46 19 A. The old way, the first way, the video still capture.

10:43:52 20 Q. And, again, what was the main reason why Mitek switched

10:43:57 21 from video still capture to video frame processing?

10:44:00 22 A. There were two main reasons. One was the feedback

10:44:04 23 about the blurry images, so we had to try something new.

10:44:07 24   And the second reason was that the phones on the

10:44:11 25 camera are getting more powerful, and those images that

10:44:14   1   they were analyzing were a lot bigger. If you're familiar

10:44:17   2   with megapixels, they used to be less than half a

10:44:22   3   megapixel, and suddenly they were one megapixel or even two

10:44:25   4   megapixels, and we didn't need to capture a new high res

10:44:30   5   image. We had one that was good already.

10:44:32   6   Q.   To your knowledge, was this change from the first way

10:44:35   7   to the second way related in any way to USAA?

10:44:38   8   A.   No, it was not.

10:44:39   9   Q.   Have you learned some Mitek documents after September

10:44:44   10 2014 and after this change that incorrectly describe how

10:44:48   11 MiSnap's auto capture works today?

10:44:50   12 A.   Yes, I have.

10:44:54   13   MR. BITTNER: Let's look at PX-92.

10:44:57   14 Q.   (By Mr. Bittner)   Mr. Wood, what is PX-92?

10:45:01   15 A.   PX-92 is a developer's guide from MiSnap 3.1.

10:45:09   16 Q.   What do you mean by developer's guide?

10:45:12   17 A.   A developer's guide is a guide that we give to our

10:45:17   18 customers' developers, so the developers at banks, for

10:45:21   19 example, so that they know how to use MiSnap, how to

10:45:26   20 customize it, and how to receive the message -- the image

10:45:32   21 that MiSnap is going to give back to them.

10:45:35   22 Q.   Okay.

10:45:36   23   MR. BITTNER: I want to look at Page 33 of this

10:45:38   24 document, Mr. Barnes.

10:45:41   25 Q.   (By Mr. Bittner)   And right there in the middle we see

10:45:43 1 the language: Once all conditions are met, MiSnap will

10:45:46 2 automatically snap a photo. Do you see that, Mr. Wood?

10:45:49 3 A. Yes, I do.

10:45:50 4 Q. Is that an accurate description of how the code

10:45:52 5 operates today?

10:45:53 6 A. No, it's not.

10:45:54 7 Q. Was this language accurate at some point?

10:45:57 8 A. Yes, it was.

10:45:59 9 Q. When?

10:46:00 10 A. Prior to September 2014, it was accurate.

10:46:04 11 Q. What version was Mitek using prior to September 2014?

10:46:10 12 A. That was the first way, the video still capture.

10:46:13 13 Q. Are there other documents where Mitek failed to update

10:46:17 14 its language after this change was made?

10:46:19 15 A. There was a bunch of them, yeah.

10:46:22 16   MR. BITTNER: Let's look at PX-376.

10:46:28 17 Q. (By Mr. Bittner) Mr. Wood, what is PX-376?

10:46:31 18 A. This is a programmer's guide from Mitek Version 2.3.4.

10:46:39 19 Q. What do you mean by programmer's guide?

10:46:42 20 A. A programmer's guide is just like a developer's guide,

10:46:48 21 it's for the programmers at the bank.

10:46:50 22   MR. BITTNER: Let's look at Page 5 of this

10:46:52 23 document and right there in the middle under 1.1, second

10:47:00 24 bullet point.

10:47:02 25 Q. (By Mr. Bittner) We see: Until a suitable image is

10:47:04	1	detected at which point it automatically captures.
10:47:06	2	Do you see that, sir?
10:47:07	3	A. Yes, I do.
10:47:08	4	Q. Is this an accurate description of how the code
10:47:11	5	operates today?
10:47:11	6	A. No, it's not.
10:47:13	7	Q. Were these errors in the developer's guides and
10:47:19	8	programmer's guides ever brought to Mitek's attention?
10:47:23	9	A. No, they weren't.
10:47:24	10	Q. Did you personally hear any complaints about this?
10:47:27	11	A. No, I did not.
10:47:28	12	Q. Would you expect to hear such complaints?
10:47:30	13	A. No, I wouldn't.
10:47:31	14	Q. Why not?
10:47:32	15	A. Because a programmer at a bank needs to know how to use
10:47:38	16	MiSnap, how to turn it on, how to customize it, and how to
10:47:43	17	get the image back from MiSnap. It -- they don't need to
10:47:48	18	know how MiSnap internally works.
10:47:51	19	It's kind of like if you have a printer, you just
10:47:56	20	need to know how to turn it on and how to send something to
10:47:59	21	be printed and how to pick up your paper when you're done,
10:48:01	22	but you don't need to know how the printer is -- how the
10:48:05	23	gears are turning and feeding paper in and how it's
10:48:08	24	shooting ink onto the page. You don't need to know how to
10:48:11	25	do that stuff. And it's the same thing with the developers

10:48:13   1   at banks. They don't need to know that.

10:48:16   2   THE COURT: Counsel, approach the bench, please.

10:48:24   3   MR. BITTNER: Yes, Your Honor.

10:48:28   4   (Bench Conference.)

10:48:28   5   THE COURT: Mr. Bittner, this witness just gave

10:48:31   6   opinion testimony about what people at banks need to know.

10:48:34   7   That's well outside of his personal knowledge. And it

10:48:40   8   appears to me to cross squarely over the line that I

10:48:42   9   instructed you about this witness not giving opinion

10:48:46   10   testimony. This is a computer programmer for Mitek. How

10:48:50   11   he has personal knowledge of what people who work in banks

10:48:54   12   need to know, I don't understand.

10:48:56   13   MR. BITTNER: I think he was just testifying as to

10:48:59   14   why this -- why in his knowledge this was never brought to

10:49:01   15   Mitek's attention. It's not important for anyone -- and I

10:49:11   16   can -- I can ask him to clarify that he's not offering an

10:49:14   17   opinion about what banks know or what banks do.

10:49:16   18   THE COURT: Well, it sounds like a clear inquiry

10:49:19   19   into an area that he would have no personal knowledge of

10:49:22   20   and is offering an opinion about.

10:49:24   21   MR. BITTNER: I'll clarify that, and I'm moving

10:49:26   22   on. I'm just going to ask him when he found out about

10:49:28   23   it --

10:49:29   24   THE COURT: Clarify it and move on.

10:49:33   25   MR. MELSHEIMER: Thank you, Your Honor.

10:49:34 1   (Bench conference concluded.)

10:49:34 2   THE COURT: Let's proceed.

10:49:40 3 Q. (By Mr. Bittner) To be clear, Mr. Wood, you don't

10:49:42 4 know -- you don't have any personal knowledge and are not

10:49:45 5 expressing any opinions about what banks do or don't know,

10:49:48 6 correct?

10:49:48 7 A. No, it's just my own opinion.

10:49:53 8 Q. When were -- strike that. When was --

10:49:57 9   MR. SHEASBY: Your Honor, if it's opinion

10:50:01 10 testimony, then I move to strike it.

10:50:03 11   THE COURT: Well, counsel, as I made clear, this

10:50:08 12 witness is not here to give opinions, his or anybody

10:50:12 13 else's. He's here to talk about what he knows personally.

10:50:15 14 You want to attempt to clarify this testimony one more

10:50:18 15 time, Mr. Bittner?

10:50:21 16   MR. BITTNER: Happy to do so, Your Honor.

10:50:23 17 Q. (By Mr. Bittner) Mr. Wood, you don't have any personal

10:50:26 18 knowledge of what banks do know or don't know, correct?

10:50:28 19 A. I don't have personal knowledge of what they do. I've

10:50:30 20 heard feedback from other people at Mitek --

10:50:32 21 Q. When was this -- when was Mitek's failure --

10:50:32 22   THE COURT: Just a minute, counsel.

10:50:34 23   MR. SHEASBY: Your Honor, we renew objection, now

10:50:36 24 it's a hearsay objection.

10:50:42 25   THE COURT: Ladies and gentlemen, I'm going to

10:50:44	1	instruct you to disregard this witness's testimony about
10:50:47	2	what he believes people at banks need to know to implement
10:50:51	3	this product.
10:50:52	4	Let's move on.
10:50:54	5	MR. BITTNER: Yes, Your Honor.
10:50:55	6	Q. (By Mr. Bittner) Mr. Wood, when was the failure to
10:51:00	7	update Mitek's developer and programmer's guides brought to
10:51:04	8	your attention for the first time?
10:51:07	9	A. That was during my deposition.
10:51:09	10	Q. Is Mitek in the process of updating these documents
10:51:12	11	today?
10:51:13	12	A. Yes, we are.
10:51:15	13	Q. What is the most accurate way to know how MiSnap's
10:51:20	14	computer software works?
10:51:22	15	A. You have to look at the source code. The source code
10:51:25	16	is what the phone actually uses.
10:51:30	17	Q. Now we've talked about Mitek's source code. I just
10:51:34	18	want to talk about Mitek in general.
10:51:36	19	Mr. Wood, who is or what is Mitek?
10:51:39	20	A. Mitek is a company that does a variety of products.
10:51:45	21	Q. Where is Mitek based?
10:51:47	22	MR. SHEASBY: Your Honor, objection as to
10:51:49	23	relevance.
10:51:52	24	MR. BITTNER: Your Honor --
10:51:53	25	THE COURT: Overruled.

10:51:55	1	MR. BITTNER: Thank you.
10:51:56	2	Q. (By Mr. Bittner) Where is Mitek based?
10:51:58	3	A. Mitek is based in San Diego, California.
10:52:01	4	Q. Do you know how many employees Mitek has,
10:52:04	5	approximately?
10:52:04	6	A. Over 500. We've been growing.
10:52:07	7	Q. And do you know how many customers all tolled Mitek
10:52:13	8	has?
10:52:16	9	MR. SHEASBY: Your Honor, objection, relevance.
10:52:17	10	THE COURT: I've given you some latitude and
10:52:20	11	you've exceeded it. I'm going to sustain that objection.
10:52:24	12	MR. BITTNER: Yes, Your Honor.
10:52:25	13	Q. (By Mr. Bittner) Mr. Wood, we've talked about a few
10:52:25	14	lines of DTX-11 today which was Version 2.0.6. But I
10:52:25	15	actually have all of DTX-11 printed out here. Mr. Wood,
10:52:25	16	what is -- I'm going to set it right here. This is really
10:52:37	17	heavy. Mr. Wood, what is DTX-11?
10:52:38	18	A. That is a small part of the source code in this case.
10:52:44	19	Q. Do you know how many pages of code are here in DTX-11?
10:52:49	20	A. I've been told it's 4500.
10:52:53	21	Q. If this is only a part of the code that was made
10:52:55	22	available, do you know how many pages of code was made
10:52:59	23	available in this case?
10:53:00	24	A. Yeah, there's a lot of pages for MiSnap and all the
10:53:08	25	algorithms they run, we had Android and iOS, we had over a

10:53:13 1   dozen versions. I'd estimate over a million pages of code.

10:53:22 2   Q. Were you asked about MiSnap code during your

10:53:25 3   deposition?

10:53:25 4   A. Yes, I was.

10:53:26 5   Q. Did you prepare for your deposition?

10:53:28 6   A. Yes, I did.

10:53:29 7   Q. What did you do to prepare for your deposition?

10:53:31 8   A. I reviewed source code from all those different

10:53:34 9   versions for Android and iOS to try and figure out how

10:53:41 10 MiSnap worked, how all the algorithms worked, how it had

10:53:44 11 changed over time, it was a lot.

10:53:47 12 Q. How much time did you spend preparing for your

10:53:52 13 deposition?

10:53:52 14 A. Including finding all that source code and reviewing

10:53:56 15 it, probably 150 hours, maybe.

10:53:59 16 Q. Was it possible for you to memorize every line of code

10:54:02 17 before your deposition?

10:54:03 18 A. No.

10:54:06 19 Q. Had you specifically reviewed DTX-11 before it came up

10:54:09 20 in your deposition?

10:54:11 21 A. DTX-611 or --

10:54:13 22 Q. 611, sorry, 611?

10:54:15 23 A. No, I had not.

10:54:16 24 Q. Why not?

10:54:17 25 A. I was reviewing -- that was for DevApp, and I was

10:54:21	1	reviewing the source code that our customers would have
10:54:24	2	used.
10:54:24	3	Q. Have you had a chance to review DTX-611 in greater
10:54:28	4	detail since your deposition?
10:54:30	5	A. Yes, I have.
10:54:31	6	Q. Once more, about how many pages of code did Mitek make
10:54:34	7	available in this case?
10:54:35	8	A. Over a million pages of code.
10:54:38	9	Q. Mr. Wood, based on your personal knowledge, did Mitek
10:54:41	10	take even a single line of code from USAA?
10:54:44	11	A. No, we did not.
10:54:46	12	MR. BITTNER: Pass the witness.
10:54:47	13	THE COURT: Cross-examination.
10:55:03	14	Mr. Sheasby, are you going to use that easel
10:55:06	15	during your cross-examination?
10:55:08	16	MR. SHEASBY: Just briefly, Your Honor, and then
10:55:09	17	I'll move it back.
10:55:10	18	THE COURT: All right. Let's proceed.
10:55:11	19	MR. SHEASBY: May it please the Court.
10:55:11	20	CROSS-EXAMINATION
10:55:14	21	BY MR. SHEASBY:
10:55:14	22	Q. Good -- good morning, Mr. Wood. We met before.
10:55:19	23	A. Good morning.
10:55:19	24	Q. I took your deposition, correct?
10:55:21	25	A. That's correct, yeah.

10:55:22   1   Q.   Now, in your testimony to the ladies and gentlemen of

10:55:24   2   the jury, you indicated that you're an employee of Mitek,

10:55:27   3   fair?

10:55:27   4   A.   Yes, that's fair.

10:55:28   5   Q.   Before your deposition, you were -- you met with the

10:55:31   6   Wells Fargo's lawyers who are representing Wells Fargo in

10:55:33   7   this matter multiple times, correct?

10:55:37   8   A.   Yes, I met with them.

10:55:38   9   Q.   Multiple times?

10:55:39 10   A.   Yes.

10:55:40 11   Q.   And before your testimony today, you met with Wells

10:55:45 12   Fargo's lawyers multiple times, correct?

10:55:47 13   A.   Yes, that's correct.

10:55:48 14   Q.   They prepared you for your testimony, correct?

10:55:50 15   A.   I wouldn't say it that way. We prepared.

10:55:55 16   Q.   You and Wells Fargo's lawyers jointly prepared for your

10:55:58 17   testimony, fair?

10:55:58 18   A.   Yeah, I'd say that's fair.

10:56:02 19   Q.   Now, sir, you're not an expert in this matter, correct?

10:56:07 20   A.   No, I'm not.

10:56:08 21   Q.   You didn't discuss Mr. Bueche's and USAA's patents at

10:56:15 22   all during your deposition in this matter, correct?

10:56:18 23   A.   No, we did not.

10:56:21 24   Q.   You didn't discuss it with -- with your counsel today;

10:56:24 25   is that correct?

10:56:24	1	A. I did not.
10:56:25	2	Q. You didn't talk about what concepts in the patent
10:56:27	3	that's at issue in this case mean in your testimony,
10:56:30	4	correct?
10:56:30	5	A. No, I did not.
10:56:31	6	Q. Now, looking at this demonstrative, you talked about
10:56:44	7	two different ways of doing auto capture, that was your
10:56:46	8	testimony to the jury, correct?
10:56:47	9	A. Yes, that's right.
10:56:48	10	Q. There's something called a video still capture mode; is
10:56:53	11	that correct?
10:56:53	12	A. Yes, that's correct.
10:56:54	13	Q. That's the old mode. Wells Fargo doesn't use that
10:56:58	14	mode, correct?
10:56:58	15	A. Not anymore, I agree.
10:57:00	16	Q. There's the mode that's at issue in this case, which is
10:57:03	17	the video frame processing mode, correct?
10:57:07	18	A. I imagine so.
10:57:09	19	Q. That's the mode as far as you know that Wells Fargo
10:57:13	20	currently uses, correct?
10:57:13	21	A. That's the one they're using today, yes, that's right.
10:57:15	22	Q. And in the video frame processing mode, the automatic
10:57:24	23	capture occurs when good image is detected, correct?
10:57:27	24	A. No, I disagree with that statement.
10:57:28	25	Q. Okay. So why don't we turn to the binder that your

10:57:31   1   counsel brought up to you, which is DTX- -- in that binder

10:57:35   2   is a document called DTX-0381?

10:57:38   3   A.   Sorry, which binder?

10:57:41   4   Q.   It's the binder you brought up with you for your

10:57:43   5   testimony.

10:57:43   6   A.   Okay.

10:57:43   7   Q.   It says Direct of Andrew Wood. It's a small binder.

10:57:49   8   This is what your counsel handed you, correct?

10:57:51   9   A.   I think it was already here. I'm not sure.

10:57:54 10   Q.   And to be clear, this is a Mitek document, correct?

10:58:00 11   A.   Yes, yes, it is.

10:58:02 12   Q.   So why don't we go ahead and pull up DTX-381?

10:58:10 13   And why don't we go ahead and turn to Page 4 of

10:58:18 14   that document? And on Page 4 of that document, do you see

10:58:26 15   the box at the top, it says video processing -- video frame

10:58:29 16   processing, correct?

10:58:30 17   A.   Yes.

10:58:30 18   Q.   And this is a Mitek document, and video frame

10:58:34 19   processing is the -- the form of operation that's at issue

10:58:39 20   in this court today, as far as you understand it; isn't

10:58:42 21   that correct, Mr. Wood?

10:58:44 22   A.   Yes, that's right.

10:58:45 23   Q.   And the document says: Automatic capture when good

10:58:48 24   image is detected; do you see that, sir?

10:58:50 25   A.   Yes.

10:58:51	1	Q. And you disagree with that, correct, sir?
10:58:54	2	A. Yes.
10:58:54	3	Q. Now, we -- you spoke about a number of other manuals
10:59:31	4	that have been produced by Mitek, correct, in your direct?
10:59:37	5	A. Yes, I did.
10:59:38	6	Q. And you said those manuals were inaccurate after
10:59:45	7	September of 2014, correct?
10:59:48	8	A. I said the ones that were shown to me were inaccurate.
10:59:52	9	Q. They became inaccurate after September 2014, correct?
10:59:55	10	A. I don't know if the entire manuals, but those sections
11:00:04	11	I talked about were incorrect.
11:00:06	12	Q. As of September '14?
11:00:09	13	A. Yes, 2014.
11:00:10	14	Q. September 2014. So one of the manuals you showed the
11:00:13	15	jury was PX-0092; is that correct?
11:00:16	16	A. Yes, that's correct.
11:00:21	17	MR. SHEASBY: So why don't we pull that one up?
11:00:24	18	Q. (By Mr. Sheasby) And if we turn to the second page of
11:00:27	19	that document, that manual is dated 24 June 2016, correct?
11:00:36	20	A. Yes, that's correct.
11:00:37	21	Q. That's after September 2014, correct?
11:00:40	22	A. Yes, it is.
11:00:40	23	Q. And if you turn to Page 4 of that document, it says:
11:00:49	24	If the document is in focus, 4 corners are visible, it is
11:00:54	25	not overly slanted or rotated, and the document fills at

11:00:58   1   least the minimum area required of the view finder. Those

11:01:01   2   are examples of monitoring criteria, fair?

11:01:05   3   A.   Yes, that's fair.

11:01:06   4   Q.   It goes on to say, quote, then MiSnap will capture and

11:01:10   5   return an image.

11:01:11   6   Correct?

11:01:11   7   A.   Yes, it says that.

11:01:13   8   Q.   And that was the document that was produced after

11:01:15   9   September 2014, correct?

11:01:16   10 A.   Yes, that is correct.

11:01:17   11 Q.   That was produced when the -- the video frame mode was

11:01:22   12 solely in use, correct?

11:01:23   13 A.   Yes, I agree with that.

11:01:33   14 Q.   Okay. And then let's go to PX-0376. This is another

11:01:36   15 document that you showed the ladies and gentlemen of the

11:01:37   16 jury, correct?

11:01:37   17 A.   Yes, that's correct.

11:01:38   18 Q.   You told them it was inaccurate as of September 2014,

11:01:43   19 correct?

11:01:43   20 A.   Can you repeat the question?

11:01:47   21 Q.   You told them that this manual was inaccurate, correct?

11:01:49   22 A.   Inaccurate? Those statements in it were inaccurate.

11:01:52   23 Q.   And that's because everything changed in September of

11:01:54   24 2014, correct?

11:01:55   25 A.   In the code it changed, yes.

11:02:00   1   Q.   Yes.   And this manual was dated November, 2014,

11:02:05   2   correct?

11:02:05   3   A.   Yes.

11:02:06   4   Q.   And that's after the code had changed, correct?

11:02:10   5   A.   Yes, it is.

11:02:11   6   Q.   And if we turn to Page 376.5 of that document, it

11:02:17   7   says --

11:02:17   8   MR. SHEASBY: No, let's go to Section 1.1,

11:02:19   9   Mr. Huynh.

11:02:20   10 Q.   (By Mr. Sheasby)   It says: Real-time feedback to the

11:02:24   11 end user until a suitable image is detected at which point

11:02:28   12 it automatically captures and returns the image for

11:02:30   13 processing.

11:02:31   14   Correct?

11:02:31   15 A.   Yes, the document says that.

11:02:33   16 Q.   It's describing capture after analysis of the image,

11:02:37   17 correct?

11:02:37   18 A.   Yes, that's fair.

11:02:38   19 Q.   That's after September 2014, correct?

11:02:41   20 A.   Yes, that's correct.

11:02:42   21 Q.   And that's using the new video frame processing, the

11:02:44   22 method that's at issue in this case, correct?

11:02:46   23 A.   The source is, yes.

11:02:48   24 Q.   And Mitek's manual is describing that as capture after

11:02:51   25 analysis, correct?

11:02:52	1	A. The manual is saying that, yes.
11:02:57	2	Q. The answer to my question is yes?
11:02:59	3	A. Yes.
11:03:00	4	Q. Now, you said that Mitek now knows -- well, you said
11:03:16	5	the manuals are -- are mistaken, and Mitek knows they're
11:03:19	6	mistaken, and they're trying to correct those mistakes,
11:03:22	7	correct?
11:03:22	8	A. Yes, recent -- yes, we started doing that recently.
11:03:32	9	Q. Okay. So why don't we turn to Tab 23 in your binder?
11:03:50	10	A. I don't understand Tab 23.
11:03:51	11	Q. So there's three big binders next to you. Look to your
11:03:55	12	left. Right there.
11:03:58	13	A. Okay.
11:03:58	14	Q. And in those, there'll be a tab called 23. By the way,
11:04:18	15	when I'm doing that, your deposition was taken on July
11:04:21	16	17th, 2019, correct?
11:04:23	17	A. That sounds correct.
11:04:25	18	Q. Would you accept my representation on that?
11:04:27	19	A. Sure, yeah.
11:04:28	20	Q. Thank you. So you're turning to Tab 21 [sic]?
11:04:37	21	MR. SHEASBY: Why don't we go ahead and bring that
11:04:39	22	up on the screen. I believe that's iX-0037?
11:04:49	23	Q. (By Mr. Sheasby) So this is a MiSnap for Android SDK
11:04:54	24	3.5.x. Do you see that?
11:04:56	25	A. Yes, I do.

11:04:57 1   Q. And why don't we turn to Page 36 of this document.

11:05:19 2   MR. BITTNER: Your Honor, may we approach?

11:05:21 3   THE COURT: Approach the bench.

11:05:28 4   (Bench conference.)

11:05:29 5   MR. BITTNER: I just want to know is this in

11:05:32 6   evidence. It's been pre-admitted?

11:05:34 7   MR. SHEASBY: It has not.

11:05:35 8   MR. BITTNER: Well, the, I don't know for what

11:05:37 9   purpose it's being shown. If it's for impeachment --

11:05:38 10   MR. SHEASBY: It's for impeachment.

11:05:42 11   MR. BITTNER: Well, statement -- is he going to

11:05:43 12 develop something he's going to impeach him with?

11:05:45 13   THE COURT: You're using this to potentially

11:05:47 14 impeach this witness?

11:05:48 15   MR. SHEASBY: Yes, Your Honor.

11:05:53 16   MR. BITTNER: Yeah, no foundation for impeachment.

11:05:57 17   THE COURT: You're certainly entitled to use

11:05:59 18 something that's not pre-admitted for impeachment, but you

11:06:01 19 are going to need to show a prior inconsistency.

11:06:04 20   MR. SHEASBY: Okay. I'm happy to proceed that

11:06:06 21 way, Your Honor.

11:06:06 22   THE COURT: All right.

11:06:06 23   (Bench conference concluded.)

11:06:19 24   THE COURT: Let's proceed.

11:06:35 25   MR. SHEASBY: Just give me one moment, Your Honor.

11:06:43   1   Q.   (By Mr. Sheasby)   If you can turn to Tab 27 -- Tab 27

11:06:50   2   in your binder, Mr. Wood.

11:07:21   3   A.   You say 27?

11:07:22   4   Q.   I did.

11:07:23   5   A.   Okay.

11:07:24   6   Q.   Do you recognize Tab 27 in your binder, Mr. Wood?

11:07:28   7   A.   Yes, I do.

11:07:41   8   Q.   So if you turn to Page 6 of that binder, you would

11:07:52   9   agree that MiSnap adapts to the capabilities of the

11:08:00   10   device -- using the video stream capability of the device

11:08:02   11   to automatically capture images.   Key quality conditions

11:08:05   12   are analyzed first at the device level and measured against

11:08:10   13   expected thresholds to ensure optimal images are captured

11:08:15   14   before being sent to the mobile imaging server for further

11:08:17   15   processing.

11:08:18   16   That's how the MiSnap system works, correct?

11:08:25   17   A.   Not entirely, no.

11:08:28   18   Q.   Do you agree or disagree with that statement?

11:08:30   19   A.   It's hard to say.   It's -- analyze first to ensure

11:08:48   20   optimal messages are captured.   It's very high level.

11:09:04   21   Yeah, in -- in general, it seems to describe MiSnap.

11:09:09   22   Q.   Okay.   So -- so what -- you agree that that -- what I

11:09:14   23   just showed you is an accurate description of MiSnap's

11:09:17   24   system, correct?

11:09:18   25   A.   Let me read it again, please.

11:09:21   1   I disagree about the order of the things on the

11:09:47   2   page, but in general, it's somewhat correct.

11:09:50   3   Q. Well, MiSnap provides real-time feedback to the end

11:09:55   4   user until a suitable image is detected at which point it

11:10:05   5   automatically captures and returns the image processing,

11:10:07   6   correct?

11:10:07   7   A. You said: And then it captures image. No, that's not

11:10:12   8   correct.

11:10:13   9   MR. SHEASBY: So I'd now like to publish iX-0038.

11:10:23 10   Q. (By Mr. Sheasby) So this is iX-0038. This is MiSnap

11:10:26 11   for Android SDK 3.6.x and 3.7.x. you were an Android

11:10:34 12   developer, if I remember correctly, Mr. Wood?

11:10:36 13   A. Yes, that's correct.

11:10:38 14   MR. SHEASBY: And let's turn to Page 6 of that

11:10:40 15   document.

11:10:40 16   Q. (By Mr. Sheasby) And it says: Automatic capture and

11:10:46 17   integrated analysis. And it describes the Mitek system as

11:10:51 18   MiSnap provides real-time feedback to the end user until a

11:10:54 19   suitable image is detected at which point it automatically

11:10:59 20   captures and returns the image for processing, correct?

11:11:02 21   A. Yes, that's what the document says.

11:11:07 22   Q. And that's totally incorrect under your sworn

11:11:11 23   testimony, correct?

11:11:11 24   A. For the source code, yes, it's incorrect.

11:11:13 25   Q. So whoever authorized or approved this manual was

11:11:19   1   mistaken, fair?

11:11:20   2   A.   I don't think that's a fair statement.

11:11:26   3   Q.   So whoever wrote this was accurate?

11:11:28   4   A.   It may have been accurate.   It depends on when it was

11:11:35   5   written.

11:11:35   6   Q.   Whoever modified this document was -- were they doing

11:11:38   7   it in a way that was accurate or inaccurate?

11:11:40   8   A.   If they changed this part, and I don't know, it would

11:11:46   9   be inaccurate.

11:11:50   10   Q.   Now, let's turn back to the first page of this

11:11:53   11   document.   This is the MiSnap for Android SDK 3.6.x and

11:12:02   12   3.7.x, correct?

11:12:04   13   A.   Yes, I agree.

11:12:04   14   Q.   Sir, you were the last person to modify this document;

11:12:04   15   isn't that correct?

11:12:08   16   A.   No, I was not.

11:12:09   17   Q.   Okay.

11:12:10   18   MR. SHEASBY: Why don't we turn to iX-0052?   And

11:12:18   19   why don't we put that on the screen.   And why don't we pull

11:12:22   20   up MiSnap for Android SDK 3.6.x and 3.7.x?

11:12:28   21   A.   Uh-huh, that's fine.

11:12:29   22   MR. SHEASBY: And then why don't we also pull up

11:12:32   23   the modified part of the column, Mr. Wood [sic]?

11:12:40   24   Q.   (By Mr. Sheasby)   So we have just been reviewing the

11:12:43   25   last version of MiSnap for Android SDK 3.6.x and 3 .7.x,

11:12:51   1   correct?

11:12:51   2   A.   That's correct.

11:12:52   3   Q.   You testified under oath that you were not the last

11:12:56   4   person to modify, correct?   That's what you told me.

11:12:58   5   A.   I was the last one -- not the last one to modify the

11:13:00   6   document, yes.

11:13:01   7   Q.   And on this document that I just showed you, iX-0032,

11:13:06   8   it says modified by you on March 13th, 2019, correct?

11:13:09   9   A.   That's not what it's saying.   That's incorrect.

11:13:13   10 Q.   Sir --

11:13:14   11   MR. SHEASBY: Your Honor, can you ask him to

11:13:16   12 answer the question directly, please?

11:13:18   13   THE COURT: He did give you a direct answer,

11:13:22   14 Mr. Sheasby.   You can restate your question or ask another

11:13:26   15 one.

11:13:26   16   MR. SHEASBY: I'm happy to do that, Your Honor.

11:13:27   17 Q.   (By Mr. Sheasby)   Mr. Wood, on this document, it lists

11:13:30   18 you as the modifier of the MiSnap for Android SDK 3.6.x and

11:13:38   19 3.7.x as of March 13, 2019, correct?

11:13:42   20 A.   I disagree with that statement.

11:13:54   21 Q.   Okay.   Now, you said -- well, let's turn to another

11:14:20   22 document in your binder.   Why don't we look at -- why don't

11:15:04   23 we look at iX -- Tab 31 in your binder, which is iX0040?

11:15:22   24 A.   Could you repeat the tab, please?

11:15:25   25 Q.   Tab 31.

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11:15:27   1   A.   That's different.

11:15:35   2              MR. SHEASBY:   Actually let's take that down.   I've

11:15:39   3   changed my mind.   I want to go to Tab 34 in your binder.

11:16:09   4              So why don't we pull up that document, it's

11:16:15   5   iX0045.

11:16:16   6              MR. BITTNER:   Your Honor, may we approach?

11:16:17   7              THE COURT:   You may approach.

11:16:22   8              (Bench conference.)

11:16:28   9              MR. BITTNER:   Again, Your Honor, I don't think

11:16:30  10   this has been pre-admitted.   If he's going to impeach him

11:16:32  11   with this, he needs to first lay the foundation before

11:16:35  12   publishing it to the jury.

11:16:37  13              THE COURT:   Is this a pre-admitted document?

11:16:39  14              MR. SHEASBY:   I'm about to lay the foundation,

11:16:41  15   Your Honor.

11:16:41  16              THE COURT:   All right.   Lay the foundation.

11:16:43  17              (Bench conference concluded.)

11:16:51  18              THE COURT:   Let's proceed.

11:16:53  19   Q.   (By Mr. Sheasby)   Now, for the MiSnap iOS, which is the

11:16:59  20   Apple version 3.6 and 3.7.x, MiSnap provides real-time

11:17:05  21   feedback to the end user until a suitable image is detected

11:17:10  22   at which point it automatically captures and returns the

11:17:13  23   image for processing, correct?

11:17:16  24   A.   No, that's not correct.

11:17:18  25   Q.   Okay.
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11:17:19   1   MR. SHEASBY: So why don't we pull up on the

11:17:23   2   screen, Mr. Huynh, iX0045.

11:17:31   3   Q.   (By Mr. Sheasby)   This is the MiSnap for iOS 3.6 and

11:17:36   4   3.7.x and it's the SDK, it says SDK, right?

11:17:40   5   A.   This is not the SDK.

11:17:41   6   Q.   It says SDK, correct, sir?

11:17:43   7   A.   This is a guide.

11:17:43   8   Q.   For SDK, correct, sir?

11:17:45   9   A.   That's correct.

11:17:45   10   Q.   And you told the ladies and gentlemen of the jury that

11:17:48   11   it's the SDK that -- that directs when the code said SDK,

11:17:53   12   that was the actual code, correct?

11:17:55   13   A.   I said that, but not about the docs.

11:18:00   14   Q.   For the code, correct?

11:18:01   15   A.   I said the code would say MiSnap SDK.

11:18:06   16   Q.   If it was the official code, correct?

11:18:08   17   A.   Yes.

11:18:09   18   Q.   And this is the manual for MiSnap SDK 3.6.x and 3.7.x,

11:18:18   19   correct?

11:18:18   20   A.   That's correct.

11:18:18   21   Q.   And if you turn to Page 5 of that document, in the

11:18:34   22   second col -- the second paragraph under automatic capture

11:18:37   23   and integrated image analysis, it says: MiSnap provides

11:18:43   24   real-time feedback to the end user until a suitable image

11:18:46   25   is detected at which point it automatically captures and

11:18:50 1 returns the imaging for processing. Correct?

11:18:55 2 A.   The document says that, correct.

11:18:59 3 Q.   And it's your testimony that that is wrong, correct?

11:19:03 4 A.   That's correct.

11:19:04 5 Q.   And you realized it was wrong after I took your

11:19:07 6 deposition, correct?

11:19:09 7 A.   Yes, that's correct.

11:19:10 8 Q.   And you have made extreme efforts to -- to -- to

11:19:15 9 address this incorrect problem in the document, correct?

11:19:21 10 A.   I would disagree with that.

11:19:23 11 Q.   Oh, you haven't made efforts to address the

11:19:26 12 incorrectness of these documents?

11:19:28 13 A.   We haven't made extreme efforts to. We have made

11:19:30 14 efforts.

11:19:30 15 Q.   You have made efforts to address the incorrectness of

11:19:34 16 these documents, correct?

11:19:34 17 A.   We started to, that's correct.

11:19:35 18 Q.   Now, you modified this document on September 3rd, 2019,

11:19:44 19 correct?

11:19:44 20 A.   I did not modify this document.

11:19:48 21 Q.   September 3rd, 2019 was after your deposition was

11:19:54 22 taken, correct?

11:19:54 23 A.   Yes, that's correct.

11:20:03 24 Q.   Why don't we turn to Tab 23 in your binder?

11:20:07 25   MR. SHEASBY: Which is iX0053, Mr. Huynh.

11:20:11 1   Q.   (By Mr. Sheasby)   So this is the MiSnap for iOS

11:20:13 2   documentation, correct?

11:20:13 3   A.   What tab, I'm sorry?

11:20:17 4   Q.   Tab 23.

11:20:20 5   A.   It's at the very end.   Okay.

11:20:33 6   Q.   And we were looking at the MiSnap iOS SDK for 3.6.x and

11:20:41 7   3.7.x, correct?

11:20:43 8   A.   Yes, I believe so.

11:20:44 9   Q.   And you said that document was wrong, correct?

11:20:46 10 A.   Yes, I did.

11:20:48 11 Q.   You said you didn't modify the document, correct?

11:20:52 12 A.   That's correct.

11:20:53 13 Q.   And on this document, iX00 -- on this document, which

11:20:59 14 is iX0053, under modified, it lists your name September

11:21:05 15 3rd, 2019, correct?

11:21:06 16 A.   It says modified, yes.

11:21:07 17 Q.   And it lists your name, correct?

11:21:09 18 A.   Yes, it does.

11:21:09 19 Q.   And it lists the date of September 13th, 2019, correct?

11:21:14 20 A.   Yes, it does.

11:21:15 21 Q.   Now, you showed the ladies and gentlemen of the jury

11:21:38 22 source code at DTX-611, correct?

11:21:43 23   MR. SHEASBY: And let's pull that up, Mr. Huynh.

11:21:46 24 Q.   (By Mr. Sheasby)   Now, this is iOS source code that

11:21:50 25 you're walking the jury through, correct?

11:21:52 1 A. Yes, that's correct.

11:21:53 2 Q. You didn't write this code, correct, sir?

11:21:55 3 A. I did not write this code, correct.

11:21:57 4 Q. And you -- you notice that it says DevApp in it, do you

11:22:01 5 see that?

11:22:01 6 A. Yes, I do.

11:22:02 7 Q. And in your testimony, you didn't identify a single

11:22:05 8 difference between the DevApp version of the code and any

11:22:08 9 other version of the code, correct?

11:22:12 10 A. I only talked about the DevApp, correct.

11:22:16 11 Q. Okay. You didn't identify any difference between

11:22:19 12 DevApp version of the code and SDK version of the code as

11:22:23 13 to this portion of the code, correct?

11:22:25 14 A. No, I didn't.

11:22:27 15 Q. Thank you. Now, you told the ladies and gentlemen of

11:22:34 16 the jury that you provided this source code to USAA,

11:22:42 17 correct?

11:22:42 18 A. Yes, that's correct.

11:22:44 19 Q. You provided the source code to Wells Fargo, to be

11:22:48 20 perfectly accurate, correct?

11:22:52 21 A. Yeah, probably. I gave it to counsel.

11:22:55 22 Q. You gave it to the counsel who prepared you for your

11:22:59 23 testimony today, correct, sir?

11:23:00 24 A. They didn't prepare me. We prepared together.

11:23:03 25 Q. Now, at your deposition, we talked about how the MiSnap

11:23:20   1   video frame version, the version at issue in this case,

11:23:24   2   actually worked, correct?

11:23:28   3   A.   Are we talking about video frame processing?

11:23:31   4   Q.   You and I, we talked about that when we had our

11:23:34   5   deposition together in San Diego?

11:23:36   6   A.   That's one thing we talked about, yes.

11:23:38   7   Q.   It was in La Jolla, if you remember, sir?

11:23:41   8   A.   Yes, I do.

11:23:42   9   Q.   Now, in the MiSnap system that's at issue in this case,

11:23:47 10   MiSnap requests that preview frames be sent to it from the

11:23:52 11   camera functionality, correct?

11:23:53 12   A.   Yes, that's correct.

11:23:54 13   Q.   The camera sends a preview frame to MiSnap, correct?

11:23:58 14   A.   Yes, that's correct.

11:23:59 15   Q.   A certain number of preview frames will be analyzed for

11:24:03 16   image quality by the Mitek software, correct?

11:24:08 17   A.   It depends, but in general, I agree with that.

11:24:10 18   Q.   MiSnap receives preview frames from the camera's buffer

11:24:15 19   bound by the size of the buffer, correct?

11:24:16 20   A.   It receives frames from the camera. I'm not sure what

11:24:25 21   you mean by the size of the buffer.

11:24:28 22   Q.   Why don't we turn to your deposition at Column 4, Lines

11:24:37 23   11 through 17?

11:24:39 24   MR. BITTNER: Your Honor, objection. Improper

11:24:41 25   impeachment.

11:24:45   1   THE COURT: I'll overrule that objection at this

11:24:47   2   time.

11:24:48   3   Let's proceed, Mr. Sheasby.

11:24:53   4   MR. SHEASBY: Sure.

11:24:54   5   Column 4, Lines 11 through 17, why don't we pull

11:24:59   6   that up, Mr. Huynh.

11:25:01   7   Q. (By Mr. Sheasby) Question: Which is the way that

11:25:03   8   MiSnap operates is it takes preview images from the camera

11:25:08   9   buffer, correct?

11:25:08 10   Answer: It receives preview frames from the

11:25:12 11   camera buffer bound by the size of that buffer.

11:25:16 12   Did I read your testimony correctly?

11:25:17 13   A. Okay. That's correct.

11:25:19 14   Q. Does that refresh your recollection?

11:25:24 15   A. Yes.

11:25:25 16   Q. When MiSnap analyzes the preview frames, those are in

11:25:28 17   transitory memory, correct?

11:25:29 18   A. Yes, that's correct.

11:25:31 19   Q. They're preview frames, correct?

11:25:44 20   A. Yes, that's correct.

11:25:45 21   Q. Until the -- if the monitoring criteria are not

11:25:48 22   satisfied regarding that frame, that frame will disappear,

11:25:54 23   correct?

11:25:54 24   A. Yes, I agree with that.

11:25:56 25   Q. Now, if you remember at your deposition in La Jolla, I

11:26:03   1   gave you my phone, correct?

11:26:06   2   A.   Yes, I remember.

11:26:07   3   Q.   It was an iPhone, correct?

11:26:09   4   A.   Yes, that's correct.

11:26:10   5   Q.   And I asked you to take a picture of me, and we talked

11:26:14   6   about the preview images that occurs in the iPhone before

11:26:19   7   you press the shutter button, correct?

11:26:22   8   A.   Yes, I think we did.

11:26:23   9   Q.   And when it's showing you those preview versions of the

11:26:27   10   frame, that's not capturing, is it, Mr. Wood?

11:26:29   11   A.   That's -- the camera is capturing images, but it's not

11:26:33   12   the final capture in the iPhone app case.

11:26:37   13   Q.   Sir, when you're holding the phone and you're looking

11:26:42   14   at what's called the preview mode, it's a preview, it's not

11:26:47   15   capturing, correct?

11:26:50   16   A.   I disagree with that statement.

11:26:53   17   Q.   Okay.

11:26:53   18   MR. SHEASBY: Let's turn to Column 66, Lines 23 to

11:26:56   19   67, Line 3 of your deposition.

11:27:05   20   A.   I can clear that up later.

11:27:07   21   Q.   (By Mr. Sheasby)   Question: Now, I want you to do

11:27:12   22   something else.   Now I want you to hold the phone, it's

11:27:14   23   looking at what's called preview mode, correct?

11:27:17   24   Answer: Yeah, it's showing -- it's not capturing.

11:27:21   25   It's a preview.

11:27:24 1   Was that your testimony, Mr. Wood?

11:27:27 2   A.   That was.   We were talking about manual capture at that

11:27:31 3   time.

11:27:31 4   Q.   Mr. Wood, when the camera was analyzing the preview

11:27:37 5   frames -- strike that.

11:27:40 6   Mr. Wood, in answer to my question, if you're

11:27:43 7   looking at what's called preview mode, you testified it's

11:27:48 8   not capturing, it's a preview.   That was your testimony,

11:27:53 9   correct, sir?

11:27:53 10 A.   At this point, yes.

11:27:56 11 Q.   So your testimony under oath during your deposition was

11:28:03 12 that when you're looking at the preview mode on a phone,

11:28:08 13 you testified that's not capturing, fair?

11:28:12 14 A.   That's not what I meant.

11:28:14 15 Q.   Sir, under oath, you testified that when you're looking

11:28:22 16 at the preview mode, that's not capturing, that was the

11:28:25 17 testimony you actually gave under oath, correct?

11:28:27 18 A.   At that point, I said that.

11:28:29 19 Q.   And you actually had an opportunity to correct your

11:28:32 20 deposition, correct?

11:28:33 21 A.   I don't know if I was or not.

11:28:36 22 Q.   Did you read your deposition after the fact?

11:28:38 23 A.   I did read it, yeah.

11:28:39 24 Q.   You didn't make corrections, correct?

11:28:42 25 A.   I didn't know how to.

11:28:44   1   Q.   You didn't write me a letter saying I -- I made an

11:28:48   2   incorrect statement during my deposition, did you, sir?

11:28:50   3   A.   No, I did not.   I didn't know that was an option.

11:28:54   4   Q.   Did you tell your lawyers you had made an incorrect

11:29:01   5   statement in your deposition, sir?

11:29:02   6   A.   I don't remember.

11:29:05   7   Q.   Now, let me ask you another question, which is we

11:29:14   8   talked about the preview frames, the fact that they

11:29:20   9   disappear, correct, if there's not a satisfaction of image

11:29:23   10   quality analysis, correct?

11:29:24   11   A.   Yes, that's correct.

11:29:25   12   Q.   So you talked about the fact that MiSnap assesses

11:29:40   13   monitoring criteria of the preview frames before

11:29:44   14   determining whether it has passed, correct?

11:29:47   15   A.   Yes, I did.

11:29:55   16   MR. SHEASBY: And why don't we go to Professor

11:29:57   17   Conte's Slide 117, Mr. Huynh?

11:30:02   18   Q.   (By Mr. Sheasby)   Now, you weren't here for the

11:30:16   19   testimony of Professor Conte.   You were outside of the

11:30:19   20   courtroom, correct?

11:30:21   21   A.   Yes, I was outside -- outside, yeah.

11:30:24   22   Q.   You heard about the testimony, though, correct, sir?

11:30:26   23   A.   No, I did not.

11:30:27   24   Q.   Okay.   Professor Conte described the monitoring

11:30:34   25   criteria that he believes were used in the Wells Fargo

11:30:37   1   systems, and he listed them with checkmarks in -- for

11:30:42   2   Versions 2.0.6 to 3.1.3, and then for Version 3.7.1.

11:30:49   3   You have no disagreement with his analysis of the

11:30:52   4   monitoring criteria that are used in the Wells Fargo

11:30:55   5   system, fair?

11:30:55   6   A.   I don't agree with all of these.

11:31:01   7   Q.   Okay. Well, you do agree that --

11:31:04   8   MR. SHEASBY: Let's take that down.

11:31:06   9   Q.   (By Mr. Sheasby)   You do agree that MiSnap analyzes the

11:31:11   10   brightness of the image, correct?

11:31:12   11   A.   Yes, I agree with that.

11:31:13   12   Q.   You analyze -- you agree that it analyzes the spacing

11:31:17   13   of the MICR characters, correct?

11:31:19   14   A.   Essentially, that's true, yes.

11:31:20   15   Q.   You agree that it analyzes corner detection, correct?

11:31:25   16   A.   Yes, it does.

11:31:26   17   Q.   It analyzes histograms for sharpness, correct?

11:31:30   18   A.   Yes, that's -- I agree.

11:31:31   19   Q.   You previously described these scores and thresholds as

11:31:36   20   monitoring criteria, correct?

11:31:36   21   A.   Yes, I did.

11:31:43   22   Q.   Now, we talked about the fact that MiSnap receives

11:31:47   23   preview images from the preview buffer, correct?

11:31:50   24   A.   Yes, that's correct.

11:31:52   25   Q.   These preview images are transitory, correct?

11:31:55	1	A. Yes, they are.
11:31:56	2	Q. They'll disappear if the monitoring criteria are not
11:32:00	3	satisfied, correct?
11:32:05	4	A. Yes, I agree with that.
11:32:06	5	Q. And the system that Wells Fargo analyzes -- uses
11:32:12	6	analyzes those preview images based on monitoring criteria,
11:32:15	7	correct?
11:32:15	8	A. Yes, I agree with that.
11:32:16	9	Q. And we talked about the fact that the frames will
11:32:21	10	disappear if monitoring criteria are not satisfied, fair?
11:32:23	11	A. Yes, that's fair.
11:32:24	12	Q. And then once the monitoring criteria are met, a JPEG
11:32:29	13	is created, correct?
11:32:32	14	A. Yes, that's correct.
11:32:33	15	Q. And then after the JPEG is created, there's additional
11:32:38	16	JPEG processing, correct? The additional metadata, fair?
11:32:44	17	A. Yes, there's some metadata, that's fair.
11:32:54	18	MR. SHEASBY: And why don't we turn to, Mr. Huynh,
11:32:57	19	Mr. Wood's cross-examination, Demonstrative Slide 1?
11:33:03	20	THE COURT: Counsel, approach the bench, please.
11:33:06	21	(Bench conference.)
11:33:13	22	THE COURT: I've just been told the jury's lunch
11:33:15	23	has arrived. How much additional cross time wise do you
11:33:18	24	think you have, Mr. Sheasby?
11:33:19	25	MR. SHEASBY: 30 minutes, Your Honor, or less.

11:33:21   1   THE COURT: And then I assume you'll have

11:33:24   2 redirect, Mr. Bittner?

11:33:25   3   MR. BITTNER: Yes, Your Honor.

11:33:26   4   THE COURT: This may not be ideal, but we're going

11:33:28   5 to break for lunch at this juncture. You told me 30 more

11:33:32   6 minutes?

11:33:33   7   MR. SHEASBY: I could get it done in 15 if we can

11:33:35   8 get it all done before lunch.

11:33:41   9   MR. BITTNER: I don't know how much redirect I'm

11:33:45 10 going to have. I can't -- I can't commit to Your Honor --

11:33:47 11   THE COURT: I understand that. I'm just trying to

11:33:49 12 get a ballpark idea.

11:33:50 13   MR. SHEASBY: I think my preference, I think, we

11:33:52 14 can finish this witness before lunch.

11:33:56 15   MR. BITTNER: I think that's incredibly ambitious.

11:34:00 16   THE COURT: Well, I'll let you keep going with

11:34:03 17 your cross at least for the time being, okay?

11:34:06 18   MR. SHEASBY: Thank you, Your Honor.

11:34:07 19   (Bench conference concluded.)

11:34:19 20   THE COURT: All right. Let's proceed.

11:34:20 21 Q. (By Mr. Sheasby) So we talked about the fact that the

11:34:24 22 system that Wells Fargo uses receives preview images from

11:34:28 23 the preview buffer, correct?

11:34:28 24 A. Yes, that's correct.

11:34:29 25 Q. And I put that on this demonstratives. Do you see

11:34:33   1   that, sir?

11:34:34   2   A.   Yes, I do.

11:34:34   3   Q.   We can all agree on that, correct?

11:34:36   4   A.   Yes.

11:34:37   5   Q.   Those preview images will disappear if the monitoring

11:34:41   6   criteria are not satisfied, correct?

11:34:42   7   A.   Yes, that's correct.

11:34:43   8   Q.   And then MiSnap analyzes those preview images based on

11:34:46   9   the monitoring criteria, correct, sir?

11:34:49   10   A.   Yes, that's correct.

11:34:50   11   Q.   And if the monitoring criteria are satisfied, a JPEG

11:35:00   12   file is created, correct?

11:35:01   13   A.   Not exactly. I disagree -- disagree with file.

11:35:21   14   Q.   I'm happy to reask it. Once the monitoring criteria

11:35:24   15   are met, a JPEG file is created, correct, sir?

11:35:27   16   A.   It's encoded as a JPEG, correct.

11:35:30   17   Q.   You testified previously that it was created, sir?

11:35:33   18   A.   At one point, but I usually refer to it as encoded.

11:35:39   19   Q.   Okay. So why don't we go to --

11:35:41   20   A.   It's more accurate.

11:35:44   21   Q.   -- why don't we go to Column 78, Lines 12 through 19 --

11:35:44   22   MR. BITTNER: Your Honor, may we approach?

11:35:46   23   THE COURT: Approach the bench.

11:35:51   24   (Bench conference.)

11:35:53   25   MR. BITTNER: Your Honor, he testified that's what

11:35:56	1	he -- that -- that Mr. Sheasby's representation was
11:35:57	2	accurate, so there's no impeachment here. He said: Yeah,
11:36:01	3	that's what I said. There's no impeachment.
11:36:06	4	THE COURT: Where are you going with this, Mr.
11:36:08	5	Sheasby?
11:36:08	6	MR. SHEASBY: He was waffling on -- on creating.
11:36:11	7	He said he normally doesn't use the word "create," and I'm
11:36:14	8	establishing that he uses the word "create" in his
11:36:18	9	deposition.
11:36:18	10	MR. BITTNER: He already agreed he did.
11:36:21	11	THE COURT: All right. We need to move on.
11:36:22	12	(Bench conference concluded.)
11:36:30	13	Q. (By Mr. Sheasby) You previously testified that the
11:36:32	14	JPEG was created. Those were your words, correct?
11:36:35	15	A. I do think I said that at one time.
11:36:37	16	Q. You said that in your deposition, correct?
11:36:39	17	A. Correct.
11:36:40	18	Q. You said it earlier today, correct?
11:36:42	19	A. Probably, yes.
11:36:44	20	Q. Okay.
11:36:44	21	MR. SHEASBY: So why don't we put up the
11:36:46	22	demonstrative again?
11:36:48	23	Q. (By Mr. Sheasby) So other than the use of the word
11:36:52	24	"file" next to JPEG, you agree with these three bullet
11:36:54	25	points, correct?

11:36:55 1   A.   In general, I agree.

11:36:58 2   Q.   Now, I also now want to speak about what happens after

11:37:08 3   the monitoring criteria are passed.

11:37:11 4   MR. SHEASBY: And let's go to Mr. Wood's Cross

11:37:16 5   Demonstrative No. 3.

11:37:17 6   THE COURT: You can certainly ask questions about

11:37:19 7   it.   You're not going to speak about it.

11:37:21 8   MR. SHEASBY: I apologize, Your Honor.   I withdraw

11:37:23 9   the question.

11:37:23 10   Let's pull up Mr. Wood's Demonstrative No. 3.

11:37:29 11 Q.   (By Mr. Sheasby)   So, Mr. Wood, you agree that after

11:37:32 12 the monitoring criteria are passed, Code Line 2357 is

11:37:41 13 executed, correct?

11:37:42 14 A.   Yes, I agree.

11:37:44 15 Q.   And that code line is setting a flag of capturing

11:37:49 16 image, correct?

11:37:50 17 A.   Yes, I -- that's fair.

11:37:53 18 Q.   And then after the monitoring criteria are passed, Line

11:37:57 19 2374 is set, correct, sir?

11:38:00 20 A.   Yes, that's correct.

11:38:01 21 Q.   And that defines the capture time, correct?

11:38:04 22 A.   It says -- it's the capture session time, yeah.

11:38:09 23 Q.   And the session -- the capture session ends after the

11:38:13 24 monitoring criteria have passed, correct?

11:38:17 25 A.   The session ends afterwards, yes.

11:38:19 1 Q.   And then a message is sent in Lines 2389 that auto

11:38:25 2 capture has started, correct?

11:38:26 3 A.   Yes, that's correct.

11:38:28 4 Q.   And then in Lines 2481 something is saved in a file

11:38:35 5 called docCaptureResults?

11:38:42 6 A.   I don't know what you mean by saved.

11:38:44 7 Q.   Image is placed in a file called docCaptureResults,

11:38:51 8 correct?

11:38:51 9 A.   In memory, yes. It's not saved.

11:38:52 10 Q.   An image is placed in docCaptureResults, correct?

11:39:01 11 A.   Yes, I -- no, no, I agree with that.

11:39:03 12 Q.   It's the JPEG, correct?

11:39:04 13 A.   Yes, it's the JPEG.

11:39:05 14 Q.   It's the JPEG that was created after the monitoring

11:39:08 15 criteria has been satisfied, correct?

11:39:09 16 A.   Yes, that's correct.

11:39:11 17 Q.   And then after that JPEG is created, ultimately, it

11:39:14 18 will be returned to the Wells Fargo app which will send it

11:39:19 19 to the Wells Fargo server, correct?

11:39:21 20 A.   MiSnap returns it back to the Wells Fargo app. It's

11:39:26 21 out of our hands after that.

11:39:27 22 Q.   It's your basic understanding that it's returned to the

11:39:31 23 server, correct?

11:39:31 24 A.   In general, I agree. But that's outside of MiSnap.

11:39:37 25 Q.   You have no basis to disagree with the fact that it

11:39:43   1   would be returned to the server and saved permanently at

11:39:45   2   that point, correct?

11:39:46   3   A.   I have no idea about that.

11:39:50   4   Q.   Okay. Now, you spoke about -- to be clear, you have no

11:39:53   5   idea what Wells Fargo does or does not know about the

11:39:57   6   operation of its version of MiSnap, correct?

11:40:04   7   A.   Sorry, I don't understand the question.

11:40:07   8   Q.   You haven't interviewed any Wells Fargo witnesses to

11:40:10   9   understand what they knew or didn't know about MiSnap,

11:40:13   10 correct?

11:40:13   11 A.   No, I haven't interviewed them.

11:40:15   12 Q.   Now, the code we've been looking at, the code that

11:40:18   13 actually does the obtaining of preview frames, the

11:40:23   14 monitoring of those preview frames, and the creation of a

11:40:26   15 JPEG in Android and in iOS, you did not write that code,

11:40:34   16 correct?

11:40:34   17 A.   I don't know what you mean by obtained there.

11:40:37   18 Q.   I'm happy to reask the question. The code we've been

11:40:40   19 talking about, which is speaking about taking a preview --

11:40:45   20 strike that.

11:40:45   21   The code we've been talking about in which you are

11:40:50   22 receiving a preview image, analyzing it for monitoring

11:40:55   23 criteria, and then creating a JPEG for iOS and Android, you

11:41:00   24 did not create that code, correct, sir?

11:41:02   25 A.   For iOS, I didn't. For Android, probably not.

11:41:09 1 Q.   Did you speak to the folks who created it?

11:41:12 2 A.   I don't know who created each line.

11:41:16 3 Q.   Did you ask them whether they were aware of Wells

11:41:19 4 Fargo -- strike that.

11:41:20 5   Did you ask them whether they were aware of USAA's

11:41:23 6 system when they wrote the code?

11:41:25 7 A.   No, I didn't ask them about that.

11:41:27 8 Q.   So when you testified to the jury that to your

11:41:33 9 knowledge, none of MiSnap's -- Mitek's conduct related to

11:41:36 10 USAA, you actually hadn't investigated by speaking to the

11:41:41 11 people who created the code that's at issue in this case,

11:41:45 12 fair?

11:41:46 13   MR. BITTNER: Objection, Your Honor. Misstates

11:41:49 14 testimony.

11:41:49 15   THE COURT: Overruled.

11:41:51 16 A.   Those developers were not at MiSnap -- or Mitek

11:41:54 17 anymore. I didn't speak to them.

11:41:56 18 Q.   (By Mr. Sheasby) And you didn't speak to them about

11:41:58 19 what they knew about USAA, correct?

11:41:59 20 A.   No, I did not.

11:42:00 21 Q.   You didn't speak to them about whether they looked at

11:42:04 22 USAA's application, correct?

11:42:05 23 A.   No, I did not.

11:42:06 24 Q.   Did you do anything whatsoever other than -- strike

11:42:08 25 that.

11:42:09   1   Did you do anything whatsoever at any point in

11:42:12   2   time to investigate whether Wells Fargo and Mitek were

11:42:16   3   focused on USAA when the relevant code at issue in this

11:42:20   4   case was being created?

11:42:22   5   A.   In a way. I looked at some of the really old code

11:42:29   6   from -- and saw where it came from -- from 2007, I think it

11:42:33   7   was, so I did some research. But I did not talk to those

11:42:37   8   developers.

11:42:38   9   Q.   Well, we're not dealing with code from 2007, correct,

11:42:41   10   sir?

11:42:41   11   A.   I guess that's correct.

11:42:43   12   Q.   We're dealing with code that was created, under your

11:42:45   13   testimony, September 2014, correct?

11:42:47   14   A.   Yes.

11:42:48   15   Q.   And as of September 2014, you did nothing to

11:42:52   16   investigate whether the Mitek employees who created it had

11:42:55   17   access to USAA materials, correct?

11:42:57   18   A.   Oh, since September 2014?

11:43:00   19   Q.   No, no. Let me withdraw the question and ask it this

11:43:03   20   way.

11:43:03   21   Did you do anything to investigate whether the

11:43:05   22   folks who wrote the code at issue in this case were aware

11:43:11   23   of USAA's systems?

11:43:12   24   A.   I -- since September 2014, you're saying?

11:43:26   25   Developers -- no, I didn't talk to those developers.

11:43:32   1   Q.   Okay.   Now, sir, because you don't have access to the

11:43:56   2   iOS operating system and because you haven't delved into

11:44:01   3   Android because you weren't instructed to do so, you can't

11:44:04   4   point me to any single document -- any single line of code

11:44:09   5   anywhere in the world that states that capture occurs

11:44:11   6   before the monitoring criteria are analyzed, correct?

11:44:14   7   A.   That's correct.

11:44:17   8   MR. SHEASBY: I have no further questions, Your

11:44:19   9   Honor.   I pass the witness.

11:44:20 10   THE COURT: All right.   Ladies and gentlemen,

11:44:24 11   before we proceed with the Defendant's redirect, we're

11:44:27 12   going to recess for lunch.

11:44:29 13   I'm going to ask you to take your juror notebooks

11:44:31 14   with you to the jury room, follow all the instructions I've

11:44:35 15   given you about your conduct throughout the trial,

11:44:38 16   including not to discuss the case with each other.   After

11:44:41 17   lunch, we'll proceed with any redirect testimony that the

11:44:45 18   Defendant may have with this witness.

11:44:47 19   With those instructions, the jury is excused for

11:44:49 20   lunch.

11:44:50 21   COURT SECURITY OFFICER: All rise.

11:44:51 22   (Jury out.)

11:44:52 23   THE COURT: Mr. Wood, you're clearly in the

11:45:20 24   middle of testifying.   We're breaking for lunch.   I'm

11:45:23 25   instructing you not to discuss your testimony over the

11:45:25   1   lunch break with Wells Fargo or any third party.

11:45:29   2   THE WITNESS: I understand.

11:45:29   3   THE COURT: All right. We stand in recess for

11:45:32   4   lunch.

11:45:32   5   COURT SECURITY OFFICER: All rise.

11:45:33   6   (Recess.)

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2   CERTIFICATION

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4   I HEREBY CERTIFY that the foregoing is a true and

5   correct transcript from the stenographic notes of the

6   proceedings in the above-entitled matter to the best of my

7   ability.

8

9

10   _/S/ Shelly Holmes_____   11/4/19_____
     SHELLY HOLMES, CSR, TCRR   Date
11   OFFICIAL REPORTER
     State of Texas No.: 7804
12   Expiration Date: 12/31/20

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